



# iPad Accessibility Scheme of Work for Pupils with Vision Impairment

Produced in collaboration by



Vision and Hearing Team



# Acknowledgements

I would like to express my gratitude to an amazing team of specialists who, a month before producing this scheme of work, were strangers to me. After sending a hopeful request to the VI Forum to see if anyone was interested in working with me to pull together a 'pick-up-and-go' iPad accessibility scheme of work to present towards the Vision Impairment Specialist Curriculum Project, I was delighted to receive responses from three QTVIs from other authorities around the country and Emma Cruickshank from Thomas Pocklington Trust who also brought Darren Paskell from the same trust on board. Meeting for just two hours a week remotely over a month, it has been an absolute pleasure and privilege to work on the following scheme and I have made some friends along the way. We are already talking about writing another scheme of work together and trying to keep this one updated regularly!

Please can I thank Emma for our Introductions section and Darren for his expert knowledge of VoiceOver as well as guidance on accessibility.

Please can I thank Robina Stone from Manchester Sensory Support Service, Marie Lloyd from Portsmouth's Vision and Hearing Team and Polly Hanchett from Barnet Education & Learning Service for their dedication and devotion to this scheme, working long hours often in their own time including over a holiday in order to make this happen. Emails were fired between us early in the morning and late at night in order to work in a co-ordinated way to make sure the scheme was as seamless as possible.

Finally, I would like to thank Gill Dorricott (QTVI) from Telford & Wrekin Council who was unable to join us but contributed resources which we are thankful for.

Carrie-Anne Brooke-Lovell

QTVI at Gateshead Council

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# Introduction

## Scheme of work for iPad Accessibility Training

### Scope

These documents are for use by Qualified Teachers of the Vision Impaired (QTVIs), Teaching Assistants (TAs), teaching professionals and where appropriate families.

### Introduction

This set of resources have been compiled by QTVIs from Gateshead, Portsmouth, Barnet and Manchester, and the involvement of staff from Thomas Pocklington Trust.

The inspiration for collating these resources came from the VI forum, which is an email-based group consisting of professionals who work with vision impaired children and young people (CYP).

The forum frequently receives requests to share teaching tips, advice and guidance on a range of topics, including teaching accessibility for the iPad to CYP.

### Aims

The aim of this scheme of work is to provide one central resource for teachers, professionals, and parents to teach CYP with a vision impairment the core skills of using an iPad.

The materials are broken down into sections which look at the learners' knowledge and ability to perform set tasks, and how they want to use the equipment and what their outcomes are.

The scheme of work covers the following areas:

Unit 1: Getting Started

Unit 2: iPad Functional Skills

Unit 3: Access via screen magnification

Unit 4: Accessing text

Unit 5: Alternative ways of recording

References

Appendices

### **How to Use the Scheme**

The scheme of work is designed to be as pupil-centred as possible in order to meet their very individual needs. The lessons which have been written can be delivered to a pupil of any age based on which skills and knowledge they need in order to successfully access the curriculum. All of the lessons provided have been the work of previous lesson plans which have been delivered to various age groups in a range of settings. All of the pupils had varying degrees of vision impairment.

Delivery of the scheme to each pupil can be tailored by initially using a baseline assessment in each area of the scheme. This will indicate which skills need to be developed in each area. It is recommended that an iPad accessibility lesson will contain outcomes from each unit (please

see Appendices A for lesson examples) with the exception of Unit 1 which contains a standalone lesson in order to set the iPad up although this lesson could be expanded over a period of time if necessary i.e. as part of a Functional Vision Assessment. Lessons provided are in order of delivery although some lessons are more suited for pupils with functional vision and some lessons are more suited for pupils who have little or no functional vision. An example of this is the lessons on magnification (more suited to pupils with functional vision) and the lessons on VoiceOver (more suited to pupils with little or no functional vision).

In order to further tailor these to each pupil, each lesson has the following:

**Tailor It!** - These are ideas to reflect on prior to the lesson to tailor the lesson to meet individual needs.

**Let's Apply!** – These are ideas to provide opportunities for the pupil to apply and consolidate their knowledge and skills in a variety of ways. This could be between lessons, part of another lesson or within the home environment.

**Think SMART!** – These are ways to make the suggested outcome at the beginning of every lesson as SMART as possible. They can also be used to break the lesson down into smaller lessons as required over time i.e. you may expect the pupil to only produce 2/5 correct gestures in the first lesson but this may progress to 4/5 over time.

Differentiation is based on Koenig and Holbrook's (2000) instruction on special methods for teaching pupils with a vision impairment using scaffolding. In order to make lessons achievable for each pupil, it is suggested that graduated guidance is provided after skills are modelled in the most suitable way for the pupil. For instance, in order to perform a VoiceOver gesture, a pupil with a severe vision impairment may benefit from the gesture being modelled using hand-under-hand guidance. They then achieve the lesson outcome of turning a page using a VoiceOver gesture with a high level of physical guidance (hand-under-hand). In the next lesson, they may only need physical prompting with verbal guidance etc.

Instructions are provided after every appropriate lesson to support the delivery of the lesson. There are also 'How To' guides provided at the end of some units of work. These are to share with settings and families as a quick start guide so that they can also support the pupil to use taught skills.

### **Outcome of the Scheme**

By completing the following scheme of work, it is expected that the pupil will be able to meet this suggested long-term intervention outcome:

*The pupil is able to identify, explain and use appropriate accessibility features of the iPad in order to engage in apps within the classroom environment.*

### **E-Safety**

As appropriate, lessons relating to e-safety are highlighted in appropriate places throughout the scheme of work in order for the pupil to apply their

new skills and knowledge as safely as possible. Please note that it is always very beneficial to inform staff and families when pupils have been taught new skills which could put them at risk without following e-safety rules and guidelines i.e. once a pupil has been taught how to locate information in Safari using Siri, families may like to ensure that appropriate settings have been applied within Safari.

# Scheme Skills Overview

<b>Unit 1 - Getting Started</b>
Customising Appearance
<b>Unit 2 - iPad Functional Skills</b>
Gestures Lock Options Volume and Sound How to Use and Explore Apps Files and Filing Reminders Calendar Notifications Use and manage Control Centre
<b>Unit 3: Magnification</b>
Zoom Zoom Controller Part-Screen Zoom Options Using the Magnifier
<b>Unit 4: Accessing Text</b>
Spoken Content EasyReader OCR iBooks VoiceOver
<b>Unit 5: Alternative Ways of Working</b>
Using Camera for Videos Using Camera for Photos Notes Inputting Text Word Excel

# Unit 1 – Getting Started

## **Aim**

The pupil's iPad is set up to suit their own visual needs.

## **Purpose**

The iPad has a number of settings which can be utilised in order to tailor the iPad's presentation so that it is easier for the pupil to access information displayed on it.

## **Let's tailor it! - Baseline**

- What can they already do/explain? (Using the Skills Progression Checklist for Unit 1, baseline your pupil (B/L) to identify what skills they already have in order to progress through this unit.)
- What do they want to be able to do?
- What would their parent/carer like/need them to be able to do?
- What would their teacher like/need them to be able to do?

# iPad Accessibility Skills

## Unit 1 - Getting Started

Customising the appearance 1	Progression		
Basic Skills	Introduce	Developing	Achieved
Access visual display options			
Bold text			
Larger text			
Button shapes			
On/off labels			
Increase contrast			
Differentiate without colour			
Invert colours			
Colour filters			
Reduce White Point			
Auto-Brightness			
Intermediate Skills			
Use Dark Mode			
Turn True Tone on/off			
Use Night Shift			

# Lesson 1: Getting Started

## Outcome

The pupil can identify which settings they prefer to be used in order to customise the appearance of the iPad to suit their needs.

## Preparation

Ensure that you are familiar with the instructions following this lesson.

## E-Safety

Ensure that the iPad's settings are age-appropriate.

## Key Vocabulary

Display and text size, Bold text, Larger text, Button shapes, On/Off labels, Increase Contrast, Differentiate without colour, Invert colours, Colour filters, Reduce White Point, Auto-brightness, Dark mode, True Tone, Night Shift

## Activity

Introduce the pupil to the iPad, discussing why it has been identified as a tool (or auxiliary aid) to support their access to learning. Open the Settings menu and explain how the iPad's appearance can be changed so that it is easier to see. Beginning with Display and Brightness, explore each option with the pupil and encourage them to identify their preference. Can they explain their preference?

## Tailor It!

- Change the Display & Brightness settings.
- Change the text size.
- Change the text to Bold Text.
- Change the Display & Text Size options in the Accessibility setting.

- Change the Wallpaper (this could also include taking a photo i.e. of a plain background to apply)

### **Let's Apply!**

- Ensure that if a pupil has an iPad at home, the same settings are applied.
- Challenge the pupil to set their own iPad up.
- Encourage the pupil to explore display settings further to identify any further changes.

### **Think SMART!**

**S** – Which settings do you expect to be identified during the lesson?

**M** – How many choices do you expect the pupil to be able to make?

**A** - What level of scaffolding will the pupil need be able to achieve the outcome on this occasion?

**R** – How much functional vision does the pupil have?

**T** – Does the pupil have enough time during one lesson in order to explore and identify all of their preferred settings or do they need to complete this lesson over a longer period of time?

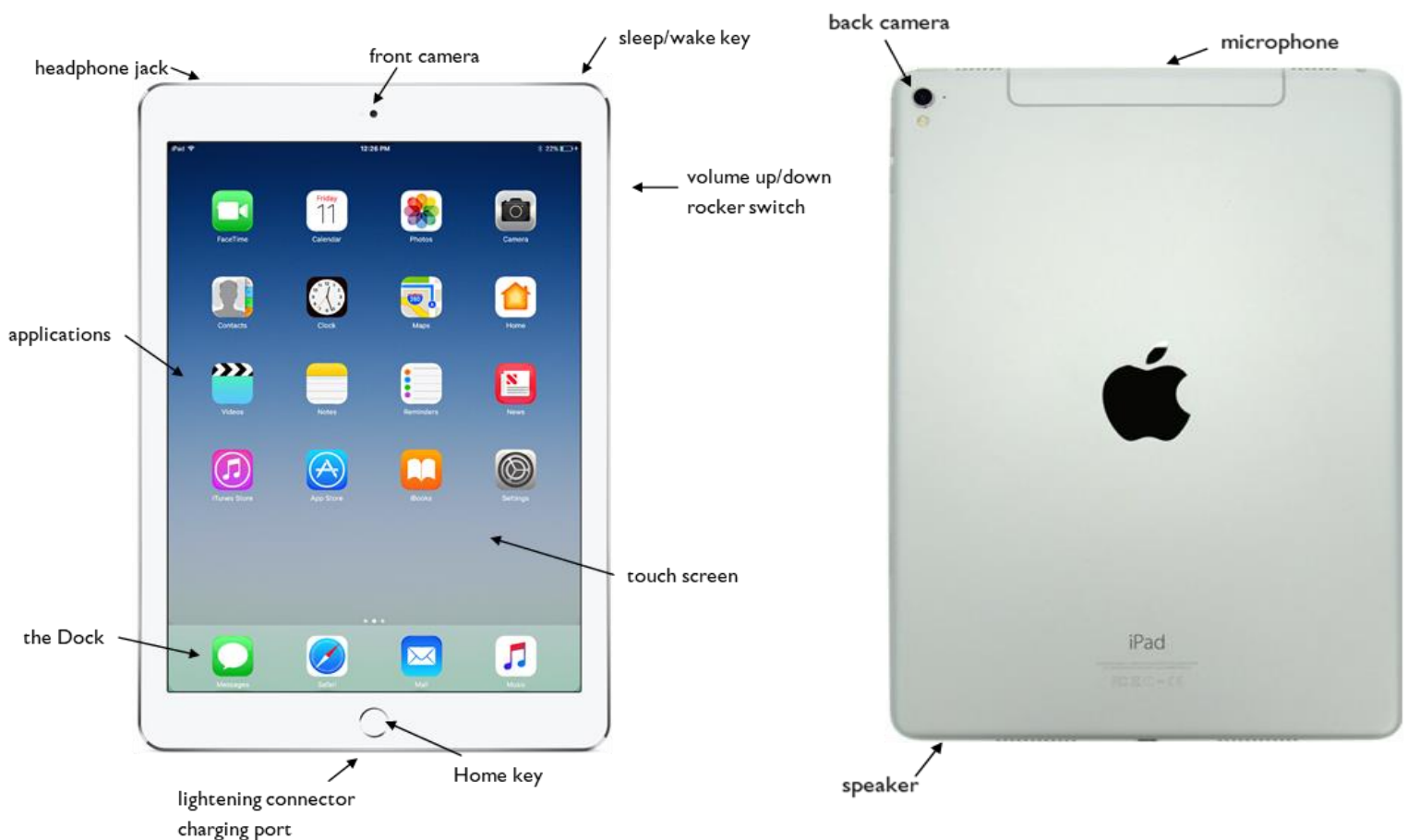
# Instructions for Lesson 1: Getting Started

## Finding your way around

### What is Where?

Place your iPad screen up in front of you with the small rectangular Lightning Connector port at the bottom edge.

Using the two diagrams below, identify all the buttons and ports.



See <https://www.callscotland.org.uk/downloads/posters-and-leaflets/a-complete-beginners-guide-to-the-ipad/> for further information.

You should be able to identify:

- the multi-touch display screen showing Home Screen with apps
- the Dock (a quick way to get to your most commonly-used apps)
- the Status Bar (front, top of screen)
- Home Button (front, underneath the screen) ***N.B. there is no Home Button on the latest iPad versions***
- connector port
- volume rocker keys
- cameras, front and back
- the Sleep/Wake button
- headset and microphone jacks

## **Customising Appearance**

This section concerns initial adjustments made to appearance which would typically be the go-to display settings.

### **Visual display options in Accessibility > Display & Text Size**

Most of the visual display options can be found in one place. It may be worth going through each one with your pupil initially and playing around with the iPad to see what difference they each make.

- Go to the **Settings** menu by tapping on the Settings key.
- Go to the **Accessibility** menu by tapping on Accessibility in the drop-down menu on the left.
- Click on 'Display and text size'.

Generally, options are presented as toggle keys, where the bump to the right (black and green) represents ON and the bump to the left represents OFF (black and white).

#### **Bold text**

Toggling this ON makes the text heavier and stand out more. You can instantly see the effect on your page.

#### **Larger text**

This enables you to change the size of the text in all apps that support Dynamic Type, which includes the Home screen and all integrated apps.

- Tap the toggle (to the right-hand side of 'Larger text, currently set at 'off').
- Tap the toggle for 'Larger Accessibility Sizes' to ON.
- Use the slide to make the text bigger or smaller. Your pupil will be able to see the effects straight away on the page.

### **Button shapes**

Toggling this ON puts a shape around on-screen buttons to make them easier to see.

### **On/Off labels**

These make it easier to identify whether buttons are toggled ON or OFF by adding a visual marker in addition to colour and toggle position: O for OFF and I for ON.

### **Increase contrast**

Toggle this to increase contrast between foreground and background colours.

### **Differentiate without colour**

For pupils who have difficulties differentiating between different colours, this provides alternative ways to convey that information.

### **Invert colours**

If toggled ON, this will reverse the colours of the display. 'Smart' and 'Classic' options are available. They are identical except that 'Smart Invert' doesn't reverse the colours of images, media and some apps with dark colour styles.

### **Colour filters**

The colour filters options allow pupils to opt not to use colours they have trouble telling apart. They can also choose to view the iPad in 'Greyscale'.

- If applicable, select a filter.
- Choose whether you want to increase or decrease the intensity of the colours selected. The sample images at the top of the screen show the different effects.
- The 'Colour Tint' menu at the bottom of the screen allows you to customise the screen using 'Intensity' and 'Hue'.

### **Reduce White Point**

Reduces the intensity of bright colours. By toggling this option to ON, you can use the sliding scale to select the reduction you require.

## **Auto-brightness**

In this option, the iPad will adjust the screen brightness according to current light conditions using the in-built light sensor.

## **Dark mode**

Dark mode gives the iPad a dark colour scheme that's great for low-light environments, or for pupils who find high-contrast visually tiring.

### **Turning Dark mode on and off**

- Open **Settings**
- Go to **Display & Brightness**
- Select Dark to turn Dark mode on, or Light to turn it off.

You can also do this from Control Centre. We will look at this later.

### **How to set Dark mode to turn on and off automatically**

- Open **Settings**
- Go to **Display & Brightness**.
- Turn on Automatic, then tap Options.
- Select either Sunset to Sunrise or Custom Schedule.
- If you choose Custom Schedule, tap the options to schedule the times you want Dark Mode to turn on and off.

If you select Sunset to Sunrise, iPad uses the data from your clock and geolocation to determine when it's night-time for you.

## **True Tone**

Turn on True Tone to automatically adapt the colour and intensity of the display to match the light in your environment. To turn ON or OFF:

- Open **Settings**
- Go to **Display & Brightness**
- Turn on True Tone.

## **Night Shift**

Night Shift describes a shift to warmer colours in the iPad display at night. This makes the screen easier and less tiring to view. To schedule Night Shift to turn on and off automatically:

- Tap on **Settings**

- Tap on **Display & Brightness**
- Tap on Night Shift
- Turn on Scheduled.

To adjust Night Shift's colour balance, find the slider below Colour Temperature to move towards cooler or warmer colours.

Set a time for Night Shift to come on and go on.

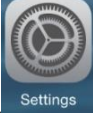
You could choose a Custom Schedule, where you select the times yourself.

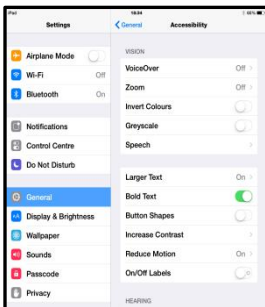
Instead, you might choose Sunset to Sunrise. Here, the iPad will use data from your clock and location to determine what these are where you are, so that the Night Shift will vary according to location and time of year.

## How to Modify Your Screen

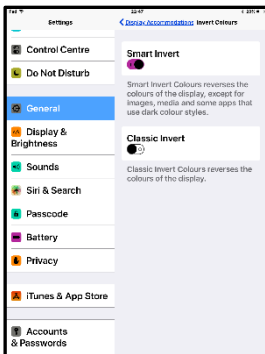
This quick start guide is designed to help you get started using the Apple accessibility features on your iPad to modify your screen, making accessing text easier.



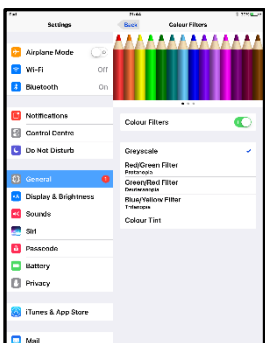
**Step 1:** Select 'Settings'  on the main display. Then make sure that 'General' is selected on the left-hand column called 'Settings' (it will be highlighted in blue).



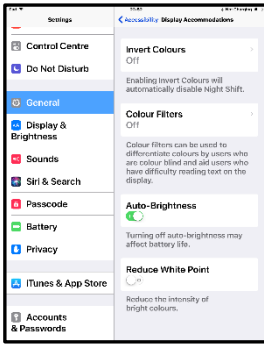
**Step 2:** Select 'Accessibility' from the right-hand column within 'General'. You will now see a list of accessibility features under the heading of 'Vision' at the top right-hand side of your screen.



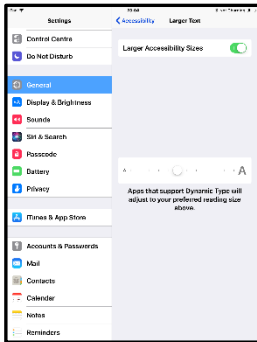
**Step 3:** By choosing 'Display Accommodations' from the right-hand column under 'Vision' options, you can 'Invert Colours' so that the screen display reverses the colours (quite like a photo negative). There are now two options. You could choose 'Classic Invert' or 'Smart Invert'. The only difference is that 'Smart Invert' will not reverse the colours of images, media and some apps which use dark colour styles. Just reselect to turn these off.



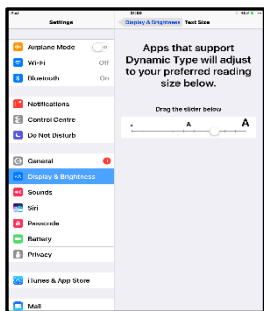
**Step 4:** Within 'Display Accommodations', you may also have the option of using 'Colour Filters'. Select 'Greyscale' from the Colour Filters menu to change the colour on the screen to shades of grey. Again, just reselect to turn this off. There are also filters for people with colour vision difficulties including Red/Green, Green/Red, Blue/Yellow. Once selected, there is an option to increase or decrease the intensity of these. There are three sample images at the top of the screen to swipe between which show the effects of the different colour filters. Finally, at the bottom of the 'Colour Filters' menu there is also a 'Colour Tint' so you can customise your screen using 'Intensity' and 'Hue'.



**Step 5:** Staying in the ‘Display Accommodations’ menu, you can select ‘Auto-Brightness’. The iPad will use its light sensor to choose the right screen brightness based on your environment. You can also select ‘Reduce White Point’, this will make any white parts of the screen a lot less glary.



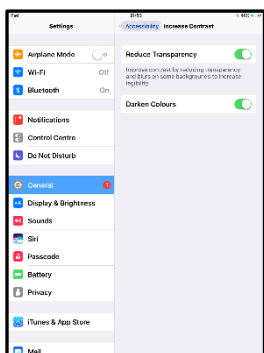
**Step 6:** In order to have larger text on the screen in apps that support the ‘Larger Dynamic Type’ feature such as Mail, Messages, Notes and some third-party apps (not owned by Apple), select ‘Larger Text’ from the ‘Accessibility’ menu on the right-hand side. A slider will appear below. Slide your finger from left to right and right to left to adjust the text size for your needs.



Please note that you can also enlarge the text by choosing ‘Display & Brightness’ from the left-hand column called ‘Settings’ and then select ‘Text Size’. By dragging your finger on the slider, you can adjust the text. However, this won’t enlarge the text to the same size as the ‘Larger Text’ option in the Accessibility menu described above.

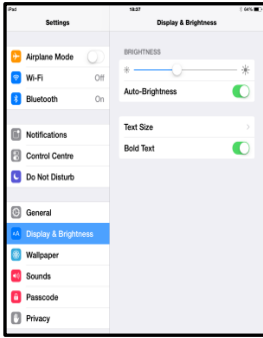


**Step 7:** Back in the Accessibility menu, by selecting ‘Bold Text’ on the right-hand side the contrast is increased making text easier to see. Please note, you can also select ‘Bold Text’ in the ‘Display and Brightness’ option in the left-hand column of the ‘Settings’ menu.



**Step 8:** Within the ‘Vision’ options of the ‘Accessibility’ menu in the right-hand column there is feature called ‘Increase Contrast’. Once selected, there are two options to increase the contrast of the screen, including ‘Reduce Transparency’ and ‘Darken Colours’.

Reduce Transparency – will make features such as popups, keyboards and the Control Centre a lot less transparent.  
Darken Colours – will make menus and tabs darker so that they are clearer.



**Step 9:** Select 'Display & Brightness' from the left-hand side column called 'Settings'. You can manually adjust the brightness of the screen by sliding your finger on the button at the right-hand top of the screen from left to right and right to left **or** select 'Auto-Brightness' as shown in Step 5.


**Other useful hints include:**

In the Accessibility menu within Settings, select 'Button Shapes' – This will put a shape around on-screen buttons.

In the Accessibility menu within Settings, select 'Reduce Motion'– This will change the screen effect of zooming when changing from the Home screen to another app to a fade effect instead. This is beneficial for people who are sensitive to the 'motion' of the screen when moving between apps and the Home screen.

In the Accessibility menu within Settings, select 'On/Off Labels' – This will add 'I' or 'O' to each button next to its option so that it is easier to see if the option is on or off.

Please note that within the Shortcut Zoom menu, there is a feature called 'Choose Filter' which includes some shortcut options to modify the screen including inverting the colours on screen, Greyscale, Greyscale Inverted and an option called Low Light which will dim the screen to the minimum amount of brightness. By selecting Low Light within the Zoom Accessibility feature, you can dim the screen even

further by opening the Control Centre and dragging the brightness control  up or down (see <https://support.apple.com/en-us/HT202769> for more information).

If you have any difficulties in modifying your screen, please use the following link to find Apple User Guides which contain full details of Accessibility Features:

<http://support.apple.com/manuals/>

Please note that accessibility features on electronic devices are updated regularly and therefore can change. This guide is designed to be as universal as possible for Apple devices, but you may find slight differences depending on the operating system (or iOS) your device is using.

# Unit 2 – iPad Functional Skills

## **Aim**

The pupil can use a number of gestures in order to engage with the iPad, applying these to control and manage apps and key functions to meet their own individual needs.

## **Purpose**

Pupils with vision impairments will have ownership of their iPad and the ability to confidently navigate it to utilise and optimise the iPad's functionality.

## **Let's tailor it! - Baseline**

- What can they already do/explain? (Using the Skills Progression Checklist for Unit 2, baseline (B/L) your pupil to identify what skills they already have in order to progress through this unit.)
- What do they want to be able to do?
- What would their parent/carer like/need them to be able to do?
- What would their teacher like/need them to be able to do?

## Medium-Term Plan

Lesson	Outcome	Key Skills	Key Knowledge	Links to Other Units
<b>Lesson 1: Basic Gestures</b>	Create an effect using a single, double and triple finger tap, tap and hold as well as drag gestures on request.	<ul style="list-style-type: none"> <li>• Produce basic gestures</li> </ul>	<ul style="list-style-type: none"> <li>• Understand correct terminology for gestures</li> <li>• Understand how to care for an iPad</li> </ul>	
<b>Lesson 2: Basic Controls</b>	Successfully differentiate between the Home button and the Sleep/Wake button as well as adjust the volume on request.	<ul style="list-style-type: none"> <li>• Turn the iPad off and on</li> <li>• Un/lock the iPad</li> <li>• Adjust the volume</li> </ul>	<ul style="list-style-type: none"> <li>• Know the difference between locking and turning the iPad off</li> <li>• Explain where the volume button is</li> </ul>	
<b>Lesson 3: App Control</b>	Explain and/or model how to switch between apps, close apps and search for an app.	<ul style="list-style-type: none"> <li>• App switch</li> <li>• Close apps</li> <li>• Use Quick Search</li> </ul>	<ul style="list-style-type: none"> <li>• Understand the purpose of app-switching</li> <li>• Relate closing an app to saving the battery</li> <li>• How using Quick Search can be more efficient to find apps</li> </ul>	
<b>Lesson 4: Getting Organised</b>	<b>Outcome</b> The pupil can utilise their iPad to efficiently locate apps on their iPad within folders, schedule	<ul style="list-style-type: none"> <li>• Create and use folders</li> <li>• Schedule alarms</li> <li>• Schedule reminders</li> </ul>	<ul style="list-style-type: none"> <li>• Understand that using folders is an efficient way of organising apps</li> <li>• How to use native apps to</li> </ul>	Unit 5b

	alarms and reminders and adapt the Control Centre to suit their individual needs.	<ul style="list-style-type: none"> <li>•Locate the Control Centre</li> <li>•Adapt the Control Centre</li> </ul>	<p>organise their day-to-day activities</p> <ul style="list-style-type: none"> <li>•What the Control Centre does</li> <li>•How to customise the Control Centre</li> </ul>	
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# iPad Accessibility Skills

## Unit 2 - iPad Functional Skills

Gestures	Progression		
Basic Skills	Introduce	Developing	Achieved
Tap			
Touch and hold			
Swipe			
Scroll			
Zoom and pinch			
Double tap			
Intermediate Skills			
Go Home			
Quickly access controls			
Open the app switcher			
Switch between open apps			
Open the Dock within an app			
Advanced Skills			
Ask Siri			
Use Accessibility Shortcut			
Take a screenshot			
Turn off			
Force restart			

# iPad Accessibility Skills

## Unit 2 - iPad Functional Skills

Lock options	Progression		
Basic Skills	Introduce	Developing	Achieved
Locate the Home button			
Turn iPad on/off (with/without a Home button)			
Turn iPad on/off (with/without a Home button)			
Send to sleep (with/without a Home button)			
Wake up (with/without a Home button)			
Intermediate Skills			
Understand the status bar			
Charge iPad by connecting to the mains			
Change a passcode			
Turn off the passcode			
Advanced Skills			
Identify all buttons and ports			
Set up Face ID and Touch ID			
Change the lock settings			
Lock or unlock the screen orientation			
Charge iPad by connecting to a PC			

# iPad Accessibility Skills

## Unit 2 - iPad Functional Skills

Volume and Sound	Progression		
Basic Skills	Introduce	Developing	Achieved
Adjust volume			
Mute the sound			
Intermediate Skills			
Use Do Not Disturb to silence calls/alerts/notifications			
Turn off sounds			
Change sounds			
Advanced Skills			
Set sound level for ringer and alerts			
Lock the ringer and alert volumes			
Limit the headphone volume			

# iPad Accessibility Skills

## Unit 2 - iPad Functional Skills

How to use and explore apps	Progression		
Basic Skills	Introduce	Developing	Achieved
Open apps on the Home screen (single-finger single-tap gesture)			
Locate app using search menu			
Use the App Switcher			
Intermediate Skills			
Open/use the Dock			
Quit and reopen an app			
Manage multiple open apps			
Move and organise apps			
Advanced Skills			
Create folders to organise apps			
Delete apps from iPad Home screen			

# iPad Accessibility Skills

## Unit 2 - iPad Functional Skills

Files and Filing	Progression		
Basic Skills	Introduce	Developing	Achieved
Open files and folders			
Change how files are sorted in folders			
Change how to view the files (as an icon/list/column)			
Find a specific file or folder			
Intermediate Skills			
Rearrange the Browse sidebar			
Create a folder			
Rename/compress/make other changes to a file or a folder			
Mark a folder as a favourite			
Send files to others			
Advanced Skills			
Set up iCloud Drive on iPad			
Turn on iCloud			
Choose which apps use iCloud Drive			
Browse iCloud Drive			

# iPad Skills

## Unit 2 - iPad Functional Skills

Reminders	Progression		
Basic Skills	Introduce	Developing	Achieved
Add a reminder			
Add more details to a reminder			
Mark a reminder as complete			
Intermediate Skills			
Edit multiple reminders all at once			
Organise reminders in lists - use smart lists			
Organise reminders in lists - create reminder lists and groups			
Move reminders into a list			
Make a sub-task			
Delete reminders			
Advanced Skills			
Change your Reminders settings			
Share reminders and collaborate on iPad			

# iPad Accessibility Skills

## Unit 2 - iPad Functional Skills

Using the Calendar	Progression		
Basic Skills	Introduce	Developing	Achieved
Set up a Calendar account			
Add an event to your calendar			
Delete an event			
Intermediate Skills			
Edit an event - access the edit menu			
Edit - Change event time			
Edit - Set an alert			
Edit - Add/remove an attachment to an event			
Find events in other apps			
Change how you view events			
Send/receive/respond to diary invitations			
Advanced Skills			
Schedule a meeting without blocking your schedule			
Suggest a different meeting time			
Customise and track events			
Use multiple calendars			
Share iCloud calendars			

# iPad Accessibility Skills

## Unit 2 - iPad Functional Skills

Notifications	Progression		
Basic Skills	Introduce	Developing	Achieved
Read notifications			
Respond to notifications			
Dismiss/clear/manage notifications			
Intermediate Skills			
Change notification settings			
Allow notification previews			
Choose which notifications to allow			
Show recent notifications on the Lock Screen			
Advanced Skills			
Set Do Not Disturb			
Allow calls when Do Not Disturb is on			
Allow calls from emergency contacts when Do Not Disturb is on			
Schedule quiet hours			

# iPad Accessibility Skills

## Unit 2 - iPad Functional Skills

Using and managing the Control Centre	Progression		
Basic Skills	Introduce	Developing	Achieved
Open Control Centre			
Access more controls in Control Centre			
Advanced Skills			
Temporarily disconnect from a Wi-Fi network			
Temporarily disconnect from Bluetooth devices			
Add and organise controls			

# Lesson 1: Basic Gestures

## Outcome

Create an effect using a single, double and triple finger tap, tap and hold as well as drag gestures on request.

## Preparation

You will need to download apps such as Mini Pet Café app, Art of Glow app, I Love Fireworks app, Rainbow Draw app, Toca Band app, R-Tap Drums app, Popping Bubbles app, Robot Lab app, Toca Monsters app, Reactickles Magic app, Finger Paint app, Magic Piano app, Robot Lab app.

## E-Safety

What equipment are you currently responsible for? Can you demonstrate safe handling of an iPad? How do you demonstrate respect for this equipment? Discuss how these behaviours can be transferred to the iPad and how it can be looked after in school i.e. where would it be placed during school hours and who is responsible for identifying when it needs charging etc.

## Key Vocabulary

Single – finger single tap, single-finger double tap, single-finger triple tap, single-finger tap and hold, single-finger tap and drag

## Activity

Model completing a single-finger tap in order to create an effect in a motivating app. Provide guidance in order to encourage the pupil to produce an effect using this gesture on request. Extend to single-finger double and then triple-tap before moving onto single-finger tap and drag and tap and hold gestures. Finally focus on double-finger and triple-finger gestures. Challenge the pupil to increase accuracy and speed in using these gestures. Encourage

understanding of when they have successfully completed a focussed gesture and ensure that the correct terminology is used for each gesture.

### **Tailor It!**

- Explore success in using fingers to complete gestures with a stylus or iPad crayon.
- Use Siri to open apps using voice-driven command.
- Ensure that instructions reflect the pupil's current understanding of prepositions and directional vocabulary.
- Identify appropriate and motivating apps based on pupil's preference.
- Ensure that the apps identified are accessible for the pupil based on their visual needs.
- The pupil may benefit from using Guided Access (another accessibility feature) to assist them to stay in an app.

### **Let's Apply!**

- Ensure that the pupil has a lot of opportunity to transfer each gesture to a range of other cause and effect apps which reward the pupil for completing the gestures such as a rewarding sound or image.

### **Think SMART!**

**S** – Which gestures do you expect the pupil to perform by the end of the lesson? Will you expect them to apply these gestures to multiple apps or just one?

**M** – How many gestures do you expect the pupil to confidently name and perform? How many occasions do you expect the pupil to correct perform the gesture? Within how many attempts do you expect the pupil to correctly perform the gesture?

**A** - What level of scaffolding will the pupil need be able to achieve the outcome on this occasion?

**R** – Will they be able to retain all of the gestures in one lesson? Do they have sufficient fine motor skills to perform these gestures?

**T** – Will the pupil be able to learn all of these gestures in one lesson or will the pupil need to focus on one gesture each lesson with opportunities to practise and consolidate learned gestures too i.e. as a Warm Up?

# Instructions for Lesson 1: Gestures

## **Tap**

Touch one finger lightly on screen

**Try:** opening an app by tapping on the icon on the Home Screen. Use the Home button to return.

## **Touch and hold**

As a tap but hold the finger down for a second. This opens a quick actions menu for the item you are holding.

**Try:** on the Home Screen, touch and hold an app icon to open a quick actions menu, or touch and holding within an app e.g. KeyNote.

## **Swipe**

Move one finger across the screen quickly before lifting.

**Try:** swiping through the list of apps on the Home screen

## **Scroll**

Move one finger across the screen without lifting

**Try:** going into Safari > Wikipedia.org and scrolling through an article.

## **Zoom & Pinch**

Place two fingers on the screen near each other. Spread them apart to enlarge the image and zoom in to a part of it or bring them back together in a pinch to zoom back out again.

**Try:** taking a photo using the Photos app, going into the photo (underneath the round white shutter button) and use the Zoom/Pinch option to look at fine details and then come out again.

## **Double tap**

You can also double-tap a photo or webpage to zoom in. To zoom out again, either double-tap again or use the Pinch gesture. drag down to zoom out.

## **More advanced gestures (to be used in conjunction with other areas of learning in this scheme)**

### **Go Home**

Swipe up from the bottom edge of the screen to return to the Home Screen at any time.

### **Quickly access controls**

Swipe down from the top-right corner to open Control Center; touch and hold a control to reveal more options. To add or remove controls, go to Settings > Control Center.

### **Open the App Switcher**

Swipe up from the bottom edge, pause in the centre of the screen, then lift your finger. To browse the open apps, swipe right, then tap the app you want to use.

### **Switch between open apps**

Swipe left or right along the bottom edge of the screen to quickly switch between open apps.

On an iPad with a Home button, swipe with a slight arc.

### **Open the Dock within an app**

Swipe up from the bottom edge of the screen and pause to reveal the Dock. To quickly open another app, tap it in the Dock.

**Ask Siri**

Just say, "Hey Siri." Or press and hold the Sleep/Wake key and make your request.

On an iPad with a Home button, press and hold the Home button and make your request. Siri listens until you release the button.

**Use Accessibility Shortcut**

Triple-click the Sleep/Wake key.

On an iPad with a Home button, triple-click the Home button.

**Take a screenshot**

Simultaneously press and quickly release the Sleep/Wake key and volume up button.

If you have an iPad with a Home button, simultaneously press and quickly release the Sleep/Wake key and the Home button.

**Turn off**

Simultaneously press and hold the Sleep/Wake key and either volume button until the sliders appear, then drag the top slider to power off.

If you have an iPad with a Home button, press and hold the Sleep/Wake key until the sliders appear.

Alternatively, you can go to Settings > General > Shut Down.

**Force restart**

Press and release the volume up button, press and release the volume down button, then press and hold the top button until the Apple logo appears.

## Lesson 2: Basic Controls

### Outcome

Successfully differentiate between the Home button and the Sleep/Wake button as well as adjust the volume on request.

### E-Safety

Ensure that the pupil is able to input their password at the beginning of the lesson, is able to explain why having a password is important and who they should share this with.

### Key Vocabulary

Home button, Sleep/Wake button, volume

### Activity

Demonstrate turning the iPad on and off, using functional vision and auditory clues to identify when the iPad is turning on and off. Encourage the pupil to count how long they need to press the Sleep/Wake button for and discuss strategies the pupil feels could be successful in remembering how long to press this button in order to turn the iPad on and off. Once the pupil is confident in locating the sleep/wake button, develop their understanding of the Home button and locking/unlocking the iPad. Distinguish between the functions of lock and unlock and power on and off. Role-play problem-solving scenarios in which the pupil has to work out if the iPad is locked or the power is off. Then develop competency in being able to locate the volume button and provide graduated guidance in order for the pupil to adjust the volume on request, exploring multi-sensory strategies in order to locate the volume button and adjust it. Can they explain how to increase and decrease the volume when it is too loud or quiet?

## Tailor It!

- Initially ensure the iPad is in the position it is used the most with the pupil i.e. portrait or landscape when locating buttons.
- The pupil may initially benefit from bump-ons or bright stickers to identify where the key buttons are on the iPad.

## Let's Apply!

- Encourage the pupil to begin to take responsibility for turning the iPad on and off as well as adjusting the volume in class and at home.
- Look for opportunities for the pupil to problem-solve when the iPad is too quiet or loud i.e. by changing the setting without the pupil's knowledge.
- Challenge the pupil to provide instructions on turning the iPad on and off and un/locking the screen so that a friend could follow these and know the main differences between them if appropriate.

## Think SMART!

**S** – Which buttons will the pupil focus on during the lesson? How will you know that they can differentiate between the power being off and the screen being locked?

**M** – How many buttons will they be able to successfully identify and activate?

**A** - What level of scaffolding will the pupil need be able to achieve the outcome on this occasion?

**R** – Is the pupil able to differentiate yet or will the focus be on identifying when the iPad is locked or off?

**T** – Will the pupil require more lessons in order to develop their confidence in un/locking an iPad and turning the iPad on and off first?

## Instructions for Lesson 2: Lock Options

### Turning the iPad on/off and sleep/wake (for iPads with home button)

#### To turn on

- Hold down Sleep/Wake button until the Apple logo appears.
- If you have set a password, you will need to enter this before you can start using the iPad.

#### To turn off

- Hold down Sleep/Wake button until the slider appears onscreen.
- Drag slider to right to power off

*Turning off saves power!*

#### To send to sleep

Press the Sleep/Wake button once. The iPad will instantly go dark

#### To wake up

Press the Home button. If you have set a password, you will be prompted to enter this now.

### Turning the iPad on/off and sleeping (for iPads without a Home button)

#### To turn on

- Hold the iPad in portrait position.
- Simultaneously press and hold the Sleep/Wake button at the top right and the volume up button.

## Powering off

- Hold the iPad in portrait position.
- Press and hold the power button and one of the volume buttons (up or down) until the power-off slider appears.
- Swipe across to turn off the device.

## To send to sleep

Press the Sleep/Wake button once. The iPad will instantly go dark

## To wake up

Press the Sleep/Wake button once or press somewhere on the screen. If you have set a password, you will be prompted to enter this now.

## Understanding the Status Bar

The Status Bar can be found at the top of the iPad screen and gives important information about the iPad:

- Left side: time and date
- Right side: Wi-Fi and the battery charge level in percentage and graphically as a shaded battery. If you are using Bluetooth, have engaged the Orientation lock, or are in the middle of a download, these icons can also be found here.

## Charging

### To connect to the mains

Connect USB connector on the charging cable to adaptor, and then insert the smaller end into the connector port at the bottom of the iPad (just below the Home button). When charging, the iPad will chime and a picture of a battery with an electricity flash will appear on screen.

### To connect to a PC (for a slower charge)

- Connect USB connector on the charging cable to a USB port in the laptop.
- Connect the smaller end into the connector port on the iPad.

- Ensure the laptop is connected to a power source otherwise the iPad will just drain its power.

### **Use of Home button**

Pressing the Home button **once** will take you back to the Home screen if you are elsewhere e.g. exploring settings or using an app.

Pressing the Home button **twice** will show you the apps that are already opened. Tap on the icon to take you back to the app. Alternatively, **swipe up** to close the app.

Holding down the Home button **for a few seconds** will open Siri.

### **Find Control Centre**

Use Control Centre for quick access to camera, brightness, volume, timer etc.

Swipe down from top of the screen with 2 fingers to bring up the Control Centre. Tap on the icon you want to use.

To remove it again, swipe it back up or press the Home Button to return to the Home screen.

## **Passwords**

Passwords are an important way to keep a device, and personal documents protected. When a password is set, the iPad will ask for this password each time the iPad is turned on, or woken up after sleeping.

Not all services and settings allow pupils to password-protect devices, although others will require it. It is important to teach pupils how to devise and remember secure passwords, and to keep them safe and private. However, it may be a prudent precaution for them to share their password with a member of the VI service in case of emergencies.

## How to set a passcode

- Go to **Settings**
- Tap on **Touch ID & Passcode**
- Tap on Turn Passcode On.
- Enter a 6-digit numeric password.
- Re-enter at the Confirm prompt

The password is now set.

Alternatively press **Passcode options** to give you alternative passcode formats:

- Custom Alphanumeric Code (for a mixture of letters and numbers)
- Custom Numeric Code (for more than 6 numbers)
- 4-digit Numeric code (less secure but possibly more appropriate for some pupils)

## To change the passcode

- Go to **Settings**
- Tap on **Touch ID & Passcode**
- Tap on Change Passcode.
- Enter your old passcode when prompted. You will then be able to enter a new one.

## To turn off the passcode

- Go to **Settings**
- Tap on **Touch ID & Passcode**
- Tap on Turn Passcode Off.

You will be prompted to enter your passcode to confirm identity.

## Setting up Face ID and Touch ID

On some models, it is possible to set up the iPad to unlock using face or fingerprint recognition.

- Go to **Settings**
- Tap on **Touch ID & Password**
- Turn ON Fingerprint recognition and follow the instructions to add a Fingerprint.

Additional fingerprints can be added using the ‘Add a Fingerprint’ option below.

*Use of Face or Touch ID does not mean that your pupil will not also need to use and remember their numeric password, as this will be required when you turn on or restart your iPad, after 2 days of not using your iPad, when you haven’t used both password and Face/Touch ID for a certain amount of time, and if you have had 5 unsuccessful attempts to open your iPad using Face or Touch ID.*


## Changing the lock settings

You might wish to extend the amount of time the iPad remains awake before locking or, conversely, have it lock down more quickly.

- Go to **Settings**
- Tap on **Display & Brightness** in the menu on the left.
- The current setting will be displayed to the right of Auto-Lock (2 minutes is the default). To change, tap the arrow to the left of ‘2 minutes’ to bring up other time settings. Tap on the one you want to tick it.
- Press Back to return to the **Display & Brightness** menu, or the Home key to return you to the Home Screen.

## Lock or unlock the screen orientation

You can lock the screen orientation so that it doesn’t switch between landscape and portrait when you rotate iPad.

- Open **Control Centre** by dragging down from the top right-hand corner of the screen with 2 fingers.
- Find the Lock icon. It looks like this: 
- Tap it to lock the screen orientation. The padlock will shut and the icon will turn red against a pink background.

# Instructions for Lesson 2: Volume and Sound

## Adjust the volume

Use the Volume up and down buttons on the side of iPad to adjust the volume of media, alerts, and sound effects.

Alternatively, use Siri. Hold down the Home button and say, for example, “Turn up the volume” or “Turn down the volume.”

## Mute the sound

Press and hold the Volume Down button.

## Using Do Not Disturb to temporarily silence calls, alerts, and notifications

- Open Control Centre.
- Tap on the crescent moon signal to open ‘Do Not Disturb’.
- Otherwise touch and hold the sign to bring up the menu for options on how long to silence calls, alerts etc.

The ‘Do Not Disturb’ menu can also be found under Settings.

## Turn off sounds

- Open **Settings**
- Go into the **Do Not Disturb** menu
- Under ‘Silence’, you can opt to have silence ‘always’ or ‘while iPad is Locked’. Ticking ‘always’ will silence all incoming calls and notifications at all times.

## Change sounds

- Open **Settings**

- Go into the **Sounds** menu. The menu shows sounds associated with the various actions and alerts. Tap on the existing sound setting to see and hear the other options.

You can also opt to have keyboard clicks when using the on-screen keyboard, or to lock existing sounds through the toggle key.

## Set sound level for ringer and alerts

- Open **Settings**
- Go into the **Sounds** menu
- Use the Ringer and Alert slide to change volume.
- Set options for alert tones and ringtones, and ringer and alert volumes.

## Lock the ringer and alert volumes

This locks the volume of ringers and alerts and means they cannot be affected by the volume buttons.

- Tap on **Settings**
- Tap on **Sounds** to go into the Sounds menu
- Toggle to turn OFF 'Change with Buttons' (at the top).

## Limit the headphone volume

You can limit the maximum headphone volume for music and videos to protect your hearing.

- Open **Settings**
- Tap on **Sounds**
- Turn on Reduce Loud Sounds, then drag the slider to choose the maximum decibel level for headphone audio.

*Note:* If you have 'Screen Time' turned on in Settings, you can prevent changes to the maximum headphone volume. Go to Settings > Screen Time > Content & Privacy Restrictions > Reduce Loud Sounds, then select Don't Allow.

Alternatively, you can

- Open **Settings**
- Tap on **Music**
- Tap on 'Volume Limit Off' to turn it on. Use the slider to set maximum volume.

## Lesson 3: App Control

### Outcome

Explain and/or model how to switch between apps, close apps and search for an app.

### Links to Previous Learning

Ensure that the pupil is confident in applying named gestures taught in Lesson 1, Unit 2.

### Preparation

The pupil will require access to a few familiar apps i.e. Notes, Pages, Safari, PowerPoint.

### Key Vocabulary

App Switcher, close, Search

### Activity

Demonstrate how to locate apps quickly using the search menu, distinguishing between this and manually searching. Identify the pros and cons of using this feature. Encourage the pupil to use the quick search feature in order to locate named apps. Extend this to closing apps when they have finished with these, discussing the relation between this action and the battery life of the iPad. Model how to switch between apps in order to combine their functionality and produce work in a more accessible format. Challenge the pupil to complete short tasks using two apps simultaneously. Extend to three if applicable.

## Tailor it!

- Increase or decrease the amount of apps available on the iPad for the pupil to search between and close.
- Provide apps for the pupil to switch between which will be the most useful for the pupil and reflect their current school curriculum IT skills i.e. the pupil may have been introduced to Safari and Pages.
- Use VoiceOver gestures to complete the actions (ensuring that the pupil has completed Unit 5b).
- Use Item Chooser with VoiceOver to locate an app.

## Let's Apply!

- Look for opportunities to use the quick search feature to locate required apps within the classroom and home environment.
- Provide opportunities for the pupil to produce work in an electronic format and extract information from other apps i.e. Safari in class and within the home environment.

## Think SMART!

**S** – Which skills will the pupil be able to demonstrate by the end of the lesson? Will they be able to model it and/or explain how to complete an action and/or how this can be utilised to complete tasks? To whom are they going to model or explain?

**M** – How many skills will they be able to model/explain by the end of the lesson? How many steps are accurate? How many attempts are accurate?

**A** - What level of scaffolding will the pupil need be able to achieve the outcome on this occasion?

**R** – Reflect on the pupil's language skills and development in order to determine how the pupil will demonstrate they can switch between apps, close apps and search for an app. They may feel more comfortable doing this in an alternative way i.e. videoing it to show at a later date or showing a familiar peer which is observed.

**T** – Will the pupil be confident in explaining and/or modelling these skills in one lesson or do they need each skill to be introduced separately over a longer period of time?

# Instructions for Lesson 3: How to use and explore apps

## Open apps on the Home screen

- At the Home screen, wipe up from the bottom edge of the screen.
- Swipe left or right to browse apps on other Home screen pages.
- To open an app, tap its icon.
- To return to the first Home screen page, either swipe up from the bottom edge of the screen or simply press the Home key.

## Managing multiple open apps

You will often have more than one app open at a time, and it's important to know how to switch from one app to another easily.

The simplest way to move from one app to another is either to swipe across the screen with four or five fingers to go to the next app, and then the next and the next. Alternatively, swipe left or right along the bottom edge of the screen. You may need to swipe with an arc on later models.

For iPads with a Home button, click twice on the Home button

You can also do this using devices called the Dock; and the App Switcher.

## Using the Dock

The iPad Dock is a handy area at the bottom of the screen that can store frequently used apps or those you accessed recently. The left side of the Dock contains your favourite apps. Suggested apps appear on the right-hand side.

## How to open the Dock

From the Home screen, the Dock is always visible. Simply tap on the app you want to go to.

When in an app, simply swipe up from the bottom edge of the screen, pause to reveal the Dock, then tap the app you want to use. To hide it again swipe down on the Dock.

## Using the App Switcher

To open the App Switcher, swipe up from the bottom edge of the iPad and pause in the centre of the screen to see all open apps pop up on screen.

If your iPad has a Home button, you can also reach the App Switcher by double-clicking on this.

**To browse the open apps:** swipe right, then tap the app or Split View workspace you want to use.

**To return to the Home screen:** press the Home button, swipe up from the bottom of the screen, or else quickly pinch four or five fingers together.

## Move and organise apps

### 1. Move apps around the Home Screen, into the Dock, or to other pages

Touch and hold any app on the Home Screen, then tap Edit Home Screen. The apps begin to jiggle.

You can drag the app to one of the following locations:

- Another location on the same page
- The Dock at the bottom of the screen. The dots above the Dock tell you how many pages there are and which one you are viewing at the moment.
- Another Home Screen page. Drag the app to the right edge of the screen. The new page will appear shortly.

Tap Done when you are finished. You can find this at the top of the screen on the right.

### 2. Create folders and organise your apps

You can group your apps in folders to help you find them more easily on the Home Screen.

- Touch and hold any app on the Home Screen, then tap Edit Home Screen. The apps begin to jiggle.
- To create a folder, drag an app onto another app.
- Drag other apps into the folder. You can have multiple pages of apps in the folder.
- To rename the folder, tap the name field, then enter the new name.
- When you're finished, tap Done (top right).

To delete a folder, drag all the apps out of the folder. The folder will automatically delete.

### **3. Quit and reopen an app on iPad**

If an app isn't working properly, you can quit it and then try to reopen it. Quitting and reopening the app may resolve the problem. (Typically, there's no reason to quit an app; quitting it doesn't save battery power, for example.)

To quit an app, open the app switcher, then swipe up on the app.

To reopen the app, go to the Home Screen, then tap the app.

If quitting and reopening the app doesn't solve your problem, try restarting the iPad

### **4. Delete apps from iPad Home screen**

You can easily delete apps from your iPad. If you change your mind, you can download the apps again later.

- Touch and hold an app you want to delete to open a quick actions menu, then tap Delete App. If the apps begin to jiggle, tap on the X symbol by the app you want to delete.
- Tap Delete. If the apps are still jiggling, tap Done at the top right.

## Lesson 4: Getting Organised

### Outcome

The pupil can utilise their iPad to efficiently locate apps on their iPad within folders, schedule alarms and reminders and adapt the Control Centre to suit their individual needs.

### Links to Previous Learning

For pupils who require VoiceOver to successfully access this lesson, they will need to complete Unit 5b before this lesson.

### Key Vocabulary

Folders, alarms, reminders, Control Centre

### Activity

Model how to create folders, discussing the purpose of these in order to locate apps easily. Encourage the pupil to set up their own iPad, utilising folders to store relevant apps. Then explore the Reminders app, modelling how to set up reminders and schedule alarms from this. Discuss when this would be useful within the pupil's everyday context i.e. to set reminders for homework. Introduce Siri as an alternative tool to complete these actions and encourage the pupil to practise both ways until they identify their preference. Explore the Control Centre, ensuring the pupil is able to successfully open and close this using the appropriate gesture. Which apps do they need to use the most? Focus particularly on functions which will increase access i.e. Accessibility Shortcuts, Magnifier, Text Size, Brightness etc. Encourage the pupil to adapt their Control Centre to suit their own needs.

## Tailor It!

- If appropriate, model and provide guidance for the pupil to access and close the Control Centre using VoiceOver.
- If appropriate, model and provide guidance for the pupil to edit and create folders using VoiceOver.
- Present the pupil with less or more apps to put into folders.
- Adapt how many functions to focus on from the Control Centre.

## Let's Apply!

- Expand the pupil's use of Siri as an organisation tool to check the date and time.
- Extend personal organisation of the iPad by adapting the Notification Centre. If the pupil is a VoiceOver user, ensure they are able to access and close this using the appropriate gestures.
- Encourage the pupil to independently locate apps within the classroom and home environment.
- Encourage the pupil to utilise their reminders and alarms rather than relying on others to organise their workload.
- Provide opportunities for the pupil to access the Control Centre to quickly access a function within everyday opportunities.

## Think SMART!

**S** – Which adaptations will the pupil be able to apply to their own iPad by the end of the lesson? How will 'efficient' be determined?

**M** – How many folders will they make? Can they provide accurate instructions on how to make folders, adapt the Control Centre and schedule alarms and reminders? On how many occasions do you expect them to be successful?

**A** - What level of scaffolding will the pupil need be able to achieve the outcome on this occasion?

**R** – Are all/some of the skills not relevant to the pupil at this time?

**T** – Will the pupil be able to learn all of these skills and why they can be useful for the pupil within one lesson or will they need more time to gain a good understanding of the Control Centre, alarms and reminders and using app folders

## Instructions for Lesson 4 – Files and Filing

### Open files and folders

Tap on **Files** from the Home Screen. It may be on the Dock at the bottom of the screen.

To see recently opened files, tap Recents at the bottom of the screen.

Otherwise tap on Browse. You will see a list of folders you have recently used which can be explored by tapping on them.

Tapping on Browse again will open the Browse sidebar which gives additional locations and options.

### Change how files are sorted within folders

With an open file, tap Name, Date, Size, Kind, or Tags to sort as you wish.

### Change how to view the files

From an open location or folder, drag down from the centre of the screen, then do one of the following:

**View as icons:** Tap .

**View as a list:** Tap .



**View as columns:** Tap .

To look deeper into a folder hierarchy from the column view, tap an item in the rightmost column, then swipe left. To see a preview of a file along with its metadata (such as its kind and size), tap the file. (If the preview doesn't appear in the rightmost column, swipe left.) To view the file and perform various actions on it without leaving Files, tap Open under the file preview.

### Find a specific file or folder

Within **Files**, use the Search box to enter a filename or folder name.

Focus the scope of your search by tapping Recents, Date, Size Kind or Tags.

To hide the keyboard and see more results on the screen: Tap  .


To start a new search, tap your search terms into the search field.

Tap to open a result.

## Rearrange the Browse sidebar

Tap  at the top of the sidebar, tap Edit, then do any of the following:


**Hide a location:** Turn the location off.


**Delete a tag and remove it from all items:** Tap the Remove symbol  next to the tag.

**Remove an item from the Favorites list:** Tap the Remove symbol next to the item.

**Change the order of an item:** *Touch* and hold the three-line symbol to the right of the items, then drag it to a new position.

## Create a folder

- From the **Files** app, open a location or an existing folder.
- Drag down from the centre of the screen, then tap .

*Note:* If you don't see , you can't create a folder in that location.

## Rename, compress, and make other changes to a file or a folder

Touch and hold the file or folder, then choose an option: Copy, Duplicate, Move, Delete, Rename, or Compress.

To modify multiple files or folders at the same time, tap Select, tap your selections, then tap an option at the bottom of the screen.

*Note:* Some options may not be available, depending on the item you select; for example, you can't delete or move an app library (a folder labelled with the app name).

## Mark a folder as a favourite

Touch and hold the folder, then tap Favorite. Favorites appear in the Browse sidebar.

## Send files to others

You can send a copy of any file in the Files app to others. If you have a document you want to send that isn't digitized, you can scan it with Files first.

- Touch and hold the file, then tap Share.

- If the file is too big for sharing, tap **Compress** before you tap **Share**. Then touch and hold the compressed version of the file (identified as a zip file), and tap **Share**.
- Choose an option for sending (for example, **Messages** or **Mail**), then tap **Send**.

**Tip:** If the files or folders are stored in iCloud Drive, you can invite others to view or edit their contents rather than send them copies.

## Set up iCloud Drive on iPad

In **Files**, you can store files and folders in the iCloud drive. This is built into later iPad devices (iPad OS 13 onwards).

### Turn on iCloud Drive

- Tap on **Settings**
- Tap on your name at the top of the left-hand menu
- Tap on **iCloud** and turn on the **iCloud Drive**.

### Choose which apps use iCloud Drive

- Tap on **Settings**
- Tap on your name
- Tap on **iCloud**.  
Apps are listed under **Apps Using iCloud**. Toggle the button **ON** to selected those to use the **iCloud Drive**.

### Browse iCloud Drive

- Tap on **Files**
- Tap **Browse** at the bottom of the screen twice to bring up the **Sidebar**.
- Under **Locations**, tap **iCloud Drive** to browse folders and files.
- To open a folder, tap it.

# Instructions for Lesson 4: Using Reminders

The Reminders app enables you to create and organise to-do lists, as well as choose when and where to receive reminders.

## Add a reminder

Open the **Reminders** app.

When in a list, tap New Reminder, then enter text. Or if you have Apple Pencil, write in the text field.

Use the quick toolbar above the keyboard to do any of the following:

- Schedule a date and time: Tap the clock symbol to select today, tomorrow or this weekend, or else a custom date.
- Add a location with the arrow key. This will tell you where you want to be reminded. Default option is 'Getting in the car' but you can add any location in custom settings. N.B. To receive location-based reminders, you must allow Reminders to use your precise location. Go to Settings > Privacy > Location Services, turn on Location Services, tap Reminders, choose While Using the App, then turn on Precise Location.
- Tap on the flag symbol to mark an important reminder.
- Tap on the camera icon to assign a photo to the event. You can choose to use an existing photo, scan a document, or take a snap on the spot.

## To add more details to a reminder

Tap the little information sign next to the event, then do any of the following:

- **Add notes:** In the Notes field, enter more info about the reminder.
- **Add a web link:** In the URL field, enter a web address. Reminders displays the link as a thumbnail that you can tap to go to the website.
- **Get a reminder when chatting with someone in Messages:** Turn on "When messaging," then choose someone from your contacts list. The reminder appears the next time you chat with that person in Messages.
- **Set a priority:** Tap Priority, then choose an option.

To finish, tap Done.

## Mark a reminder as complete

Tap the empty circle next to a reminder to mark it as complete. This will erase it from the Reminders lists.

To unhide completed reminders click the settings button with 3 dots in the top right corner, then tap Show Completed.

## Edit multiple reminders all at once

- Tap the 3 dots Settings button and then Select Reminders.
- Select the reminders you want to edit, by tapping the circles next to them or dragging 2 fingers over the reminders to be edited.
- Use the buttons at the bottom of the screen to select the action: Delete, or move to another list.

## Organising reminders in lists

The Reminders app enables you to organise your reminders in lists and groups.

### Use smart lists

You can automatically track and organize upcoming reminders with smart lists.

Tap any of the following:

**Today:** See reminders scheduled for today and overdue reminders.

**Scheduled:** See reminders scheduled by date or time.

**Flagged:** See reminders flagged as important.

**Assigned to Me:** See reminders assigned to you. [only available on some models]

**Siri Suggestions:** See suggested reminders detected in Mail and Messages. [only available on some models]

**All:** See all your reminders across every list.

To show, hide, or rearrange the smart lists, tap Edit.

### Create reminder lists and groups

You can organize your reminders into lists and groups of lists such as work, school, or shopping. Do any of the following:

**Create & customise a new list:** Tap Add List, enter a name, then choose a colour and symbol for the list.

**Create a group of lists:** Tap Edit, tap Add Group, enter a name, then tap Create. Or drag a list onto another list.

**Move and reorder lists:** Touch and hold a list, then drag it to a new location.

**Change colour or symbol of a list or group:** Swipe left on the name, then tap the information button to change the colour or symbol.

**Delete a list or group:** swipe left on the list or group, then tap the delete icon.

## Move reminders into a list

Touch and hold the reminder. Drag it across into your chosen list.

## Make a subtask

- Tap on the information symbol to the right of your message.
- Go to 'subtasks' towards the bottom of the menu, and tap the arrow to the right of it.
- Tap Add Reminder and type in your sub-task.
- Tap on Add Reminder again before tapping on the back arrow to return you to the menu.
- Don't forget to tap on Done before going back to the main app screen.

If you delete or move a parent task, the subtasks are also deleted or moved. If you complete a parent task, the subtasks are also completed.

## Delete a reminder

Swipe left on the reminder, then tap Delete.

## Change your Reminders settings

Tap on **Settings**

Tap on **Reminders** to go to the reminders menu.

Options include:

**Today Notification:** Set a time to show notifications for all-day reminders that have been assigned a date without a time.

**Show as Overdue:** The scheduled date turns red for overdue all-day reminders.

**Mute Notifications:** Turn off notifications for assigned reminders.

See also:

[Share reminders and collaborate on iPad - Apple Support](#)

# Instructions for Lesson 4: Using the Calendar

## Set up a calendar account

Tap on **Settings**

Tap on **Calendar**

Go to Accounts, then Add Account.

Tap Other, then do any of the following:

**Add a calendar account:** Tap Add Account, then enter your server and account information

**Subscribe to iCal (.ics) calendars:** Tap Add Subscribed Calendar, then enter the URL of the .ics file to subscribe to; or import an .ics file from Mail.

## Add an event to your calendar

- Go into the Calendar app
- Tap on the plus button (top right).
- Fill in the event details.
- Enter the name and location of the event, the start and end times, how often it repeats, and so on.
- Tap Add.

Alternatively, you could use Siri:

To use Siri say “Hey Siri” and make your request e.g. “Hey Siri add Science lesson at 10am next Monday, to my calendar”.

You can also use Siri by pressing and holding down the ‘power button’ until Siri appears and saying eg “open my calendar”.

## Delete an event

Tap on the event in your calendar

A pop-up menu will appear on the screen.

Tap Delete Event at the bottom of the menu, and then confirm that you want to delete it when prompted.

## **Editing the event**

The Edit menu allows you to make changes to the start and end time of your event, put in whether it repeats, add details about travel times and invitees and others. To reach it, tap on the event in the Calendar and tap Edit (top right).

### **Change event time**

From the Edit menu, tap on Starts or Ends and edit as necessary.

### **Set an alert**

To set an alert to be reminded of an event beforehand, tap Alert in the Edit menu and choose when you'd like to be reminded – when it is time to leave, when the event is due to start, or minutes, hours or days beforehand.

*Note:* If you add the address of the event's location, Calendar uses Apple Maps to look up locations, traffic conditions, and transit options to tell you when it's time to leave.

### **Add an attachment to an event**

To add an attachment to a Calendar event to share with invitees, tap on Add attachment in the Edit menu.

The Files app opens, displaying your recently opened files. If the file is here, you can just tap it to attach. Otherwise, you can enter the file name in the Search bar, or tap the Browse option at the bottom of the screen to look in other locations.

When you have selected the file, you will return to the Edit Event menu. Tap Done to confirm changes and come out of it.

### **Remove an attachment**

Tap on the event in the calendar.

Tap Edit (top left).

Go down to the attachment name and swipe right. The 'Remove' option will appear from the right. Tap on it.

### **Find events in other apps**

Siri can suggest events found in Mail, Messages, and Safari—such as flight reservations and hotel bookings—so you can add them easily in Calendar.


- Tap on **Settings**

- Tap on Calendar
- Tap on Siri & Search to show and edit current Siri settings for Calendar. You can choose to allow Siri to make suggestions in Calendar and learn from how you use the app; or to show Siri Suggestions on Lock screen based on how you use the Calendar.

### **Change how you view events**

In the Calendar app you can view one day, a week, a month, or a year at a time.

Either tap on Day, Week, Month or Year at the top of the screen or alternatively pinch to zoom in or out when in Week or Day view.

To view upcoming events, you can tap the 'view list' symbol 

### **Send and receive invitations**

In the Calendar app, you can send and receive meeting invitations. N.B. Not all calendar servers support every feature.

#### **Invite others to an event**

If you scheduled the event:

- Tap the event, tap Edit, then tap Invitees.
- Type in the names or addresses of the people you'd like to invite. If you tap the Plus sign, you can browse your Contacts.
- Tap Done when you are finished.

If it's someone else's event:

- Tap the event, tap Invitees and then tap the envelope.
- Type in the names or addresses of the people you'd like to invite. If you tap the Plus sign, you can browse your Contacts.
- Tap Send when you are finished.

#### **Respond to a diary invitation**

To respond to an event notification, tap it. You could also check your Inbox (bottom right of the screen).

Tap your response—Accept, Maybe, or Decline.

To respond to an invitation you receive by email, tap the underlined text in the email, then tap Show in Calendar.

## **Schedule a meeting without blocking your schedule**

You can add an event to your calendar without having the timeframe appear as busy to others who send you invitations.

- Tap the event, then tap Edit.
- Tap Show As, then tap Free.

## **Suggest a different meeting time**

You can suggest a different time for a meeting invitation you've received.

- Tap the meeting, then tap Propose New Time.
- Tap the time, then enter a new one.
- Tap Done, then tap Send.

See also:

### **Search for/customise/track events**

<https://support.apple.com/en-gb/guide/ipad/ipad6a79cb00/14.0/ipados/14.0>

<https://support.apple.com/en-gb/guide/ipad/ipadfe71d772/14.0/ipados/14.0>

<https://support.apple.com/en-gb/guide/ipad/ipad580b4126/14.0/ipados/14.0>

### **Use multiple calendars**

<https://support.apple.com/en-gb/guide/ipad/ipad1b02bf5b/14.0/ipados/14.0>

### **Share iCloud calendars**

<https://support.apple.com/en-gb/guide/ipad/ipadc2a14a22/14.0/ipados/14.0>

# Instructions for Lesson 4: Using Notifications

Notifications help you keep track of what's new—if you have a missed call, if an event has been postponed, even top news stories – and they can be customised so that you only see what is important to you.

## Read your notifications

Notifications will be displayed as they arrive, but if you choose not to read them immediately, they are saved in the Notification Centre.

You can reach Notification by swiping down from the top centre of the iPad screen, and then scrolling down to see older Notifications.

To close Notification Center, swipe up from the bottom, or press the Home button.

## Respond to notifications

When you have multiple notifications in Notification Center or on the Lock Screen, they're grouped by app, which makes them easier to view and manage. Notifications from some apps may also be grouped by organizing features within the app, such as by topic or thread. Grouped notifications appear as small stacks, with the most recent notification on top.

Do any of the following:

- To expand a group of notifications to see them individually, tap the group. To close the group again, tap Show Less.
- Tap a notification to open the app that it's from and respond.
- Touch and hold a notification to view it and perform quick actions if the app offers them. Or swipe the notification left, then tap View.
- To respond when iPad is locked, touch and hold the notification.

## Dismiss, clear, and manage notifications


Do any of the following:

**Handle a notification you receive while using another app:** Pull it down to view it, then swipe up to dismiss it.

**Clear notifications:** Swipe left over the notification or group, then tap Clear or Clear All.

**Turn off notifications for an app or notification group:** Swipe left on the notification or group of notifications, tap Manage, then tap Turn Off.

**Change how an app displays notifications:** Swipe left on a notification, tap Manage, tap Settings, then choose an option. You can choose whether to allow notifications from the app, where the notifications appear (in Notification Centre, for example), whether to play an alert sound, and so on.

**Clear all your notifications in Notification Centre:** Tap , then tap Clear. When you haven't used an app for a while, Siri suggests that you turn off notifications for that app.

## Change notification settings

You can choose which apps can send notifications, change the alert sound, set up location-based alerts, allow government alerts, and more. Most notification settings can be customized for each app. You can turn app notifications on or off, have notifications play a sound, choose how and where you want app notifications to appear when your device is unlocked, and more.

## Allowing Notification Previews

Notifications give you a quick summary or snapshot of a full Notification, and may include text from Messages or Mail, or invitation details from Calendar.

- Tap on **Settings**
- Tap on **Notifications**.
- Tap on Show Previews and select an option—Always, When Unlocked, or Never. (You can override this setting for individual apps.)

## Choosing which Notifications to allow

- Tap on **Settings**
- Tap on **Notifications**.
- Below Notification Style, tap on each app to toggle Allow Notifications On or Off.

If you turn on notifications, choose how and where you want the notifications to appear for the app—for example, on the Lock Screen or in Notification Center. You can also set a notification banner style, sound, and badges for many apps.

Tap Notification Grouping, then choose how you want the notifications grouped:

**By App:** All the notifications from the app are grouped together.

**Automatic:** The notifications from the app are grouped according to organizing criteria within the app, such as by topic or thread.

**Off:** Turn off grouping.

## Show recent notifications on the Lock Screen

- Tap on **Settings**
- Go to Touch ID & Passcode. You will be asked to enter your passcode to get in.
- Toggle on Notification Centre (below Allow Access When Locked).

## Set Do Not Disturb

To quickly silence iPad, whether you're going into a lesson or going to bed, turn on Do Not Disturb. It silences notifications and calls and prevents them from lighting up the screen.

- Tap on **Settings**
- Tap on Do Not Disturb
- Toggle on.

Do Not Disturb can also be turned on via the Control Centre.

## Allow calls when Do Not Disturb is on

- Tap on Settings
- Tap on Do Not Disturb

Do any of the following:

**Tap Allow Calls From:** To allow incoming FaceTime and Wi-Fi calls from selected groups.

**Turn on Repeated Calls:** To allow repeated calls from the same caller to come through for emergencies.

## Allow calls from emergency contacts when Do Not Disturb is on

You can allow FaceTime and Wi-Fi calls and messages from emergency contacts when Do Not Disturb is on.

- Open Contacts from the Home Screen.
- Select a contact, then tap Edit.
- Tap Ringtone or Text Tone, then turn on Emergency Bypass.

## Schedule quiet hours

Go to Settings  > Do Not Disturb.

Turn on Scheduled, then set the start time and end time for quiet hours.

**Tip:** To dim your display during quiet hours, turn on Dim Lock Screen.

Do Not Disturb turns off automatically at the end of the quiet hours you specify.

To turn it off sooner, tap the Do Not Disturb notification on the Lock Screen, then tap Turn Off. When Do Not Disturb is off, notifications resume.

# Instructions for Lesson 4: The Control Centre

The Control Centre on an iPad gives you instant access to useful controls—including airplane mode, Do Not Disturb, a flashlight, volume and screen appearance controls and instant access to apps.

## **Open Control Centre**

Swipe down from the top right of the screen with 2 fingers. To close it again, swipe up from the bottom of the Panel, or just return to the Home screen using the Home key or swiping up from the bottom of the screen.

## **Appearance options in Control Centre**

The Control Panel is automatically set to include a variety of appearance options.

### **1. Adjust the screen brightness**

The brightness slider (with a sun on it) can be moved up or down to instantly increase or decrease brightness.

This can also be achieved by going to Settings > Display & Brightness and using the slider to adjust brightness.

### **2. Turn Dark Mode On or Off**

Touch and hold the brightness button. You will see a Dark Mode button which can be tapped ON or OFF.

### **3. Turn Night Shift On or Off**

Touch and hold the brightness button. You will see a Night Shift button. Tap to turn ON or OFF.

### **4. Turn True Tone on or off (only available on some models)**

Touch and hold the brightness button. You will see a True Tone button. Tap to turn ON or OFF.

### **5. Change the text size**

In Control Panel, click on the Text button. It will open to give you a sliding scale of text size. Adjust as required.

## 6. Turn on magnifying glass

In Control Panel, tap on the magnifying glass. The iPad will open to Magnifying Glass, Use the slider at the bottom to increase or decrease magnification.

## Customising the Control Centre

You can make changes and additions to the Control Panel to make it more useful and easier to use.


### Add more appearance options

- Go to **Settings**
- Tap on **Control Centre**.
- At the top of the screen under 'Include' are the apps that are already on the Control Centre.
- Under 'More Controls' are those that are not. To add more controls, tap on the green + button.

### Reorganising controls in your Control Centre

- Tap on **Settings**
- Tap on **Control Centre**
- In the 'Include' menu, which lists those controls that are already in your centre, touch the symbol next to the control you want to move. It looks like 3 lines. Drag it to its new position.

### Temporarily disconnect from a Wi-Fi network


In **Control Centre**, tap the Wi-Fi icon ; to reconnect, tap it again.

To see the name of the connected Wi-Fi network, touch and hold the Wi-Fi icon.

Because Wi-Fi isn't turned off when you disconnect from a network, AirPlay and AirDrop still work, and iPad joins known networks when you change locations or restart iPad.

*You can also turn Wi-Fi on and off in Settings > Wi-Fi.*

## **Temporarily disconnect from Bluetooth devices**

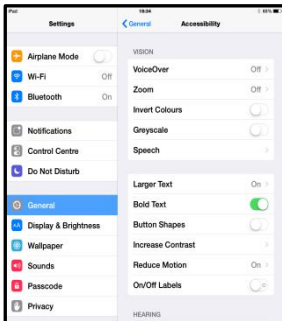
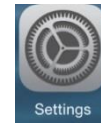
In **Control Centre**, tap the Bluetooth icon ; to allow connections, tap the button again.

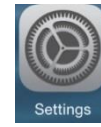
Because Bluetooth isn't turned off when you disconnect from devices, location accuracy and other services are still enabled.

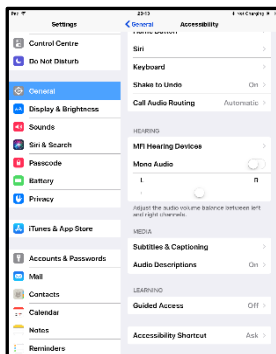
*You can also turn Bluetooth On and Off in Settings > Bluetooth.*

## How to use Guided Access

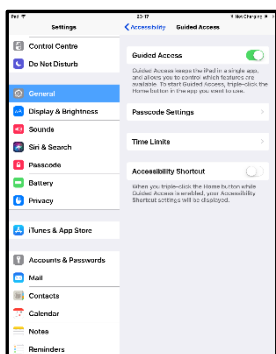
This quick start guide is designed to help you get started using the Apple accessibility feature called Guided Access. Guided Access is a feature which enables you to lock the iPad within an app and control which app features are available. This is very helpful to stop children and young people from accidentally exiting apps and tapping on adverts within apps.



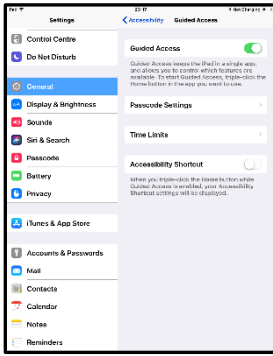
**Step 1:** To turn on Guided Access, go to settings . Select General on the left-hand side menu and then locate Accessibility from either the right-hand side or it may be further down the screen on the left-hand side.



**Step 2:** Guided Access is either under the 'Learning' or 'General' section in the Accessibility menu. To turn this on, tap the button on the right of 'Guided Access'.



**Step 3:** You will now be in the Guided Access menu. Select 'Guided Access' by touching the button to its right. More options will then appear.



**Step 4:** It is very important that you select 'Passcode Settings' underneath the option to turn on 'Guided Access'. This will take you to another screen. Select 'Set Guided Access Passcode'. This passcode is only for 'Guided Access' so it doesn't have to be too complex but not one your child or young person will easily guess. Once you have entered your password, press the 'Guided Access' button at the top of the screen to return to the 'Guided Access' menu.



**Step 5:** Come out of the Guided Access menu by pressing the Home Button and open an app you wish to use Guided Access with.



**Step 6:** Start Guided Access by pressing the Home Button three times. This will shrink the app screen into the middle of the iPad screen and you will see the Guided Access menu appear on a black background on the top and bottom of this.



**Step 7:** To block out any adverts or options you don't want your child or young person to select, draw around these with one finger. You will see a black line appear. The area you have chosen will change to grey. You can adjust how large the area to block out is by dragging your fingers on the small, white circles on the edge of the grey area. This can be repeated until all of the adverts and options that you don't want are blocked out. This means that even if the child or young person touches these, nothing will happen.



**Step 8:** You can also stop anything happening when the child or young person touches the 'Sleep/Wake Button', 'Volume Buttons', 'Motion' option and 'Keyboards'. This is done by selecting the 'Hardware Buttons' option or 'Options' at the bottom left-hand side of the screen.



**Step 9:** At the bottom of the screen you can also select 'Touch', which means that any onscreen touches are then ignored, and 'Time Limit', which sets a limit on how long Guided Access will run for. Once you have made your selections, press 'Start' at the top right-hand side of the screen. When you have finished within the app, press the Home Button again three times. You will be asked to enter the Guided Access passcode you set in Step 4 twice. Finally, select 'End' at the top left-hand side of the screen.

**Other useful hints include:**

In the Guided Access menu within Settings, choose 'Time Limits' – This will set a time limit on how long Guided Access will run for. There are two alarm options available, the first to warn you when half the time has gone and the second when the Guided Access session has finished. You can choose from a choice of sounds or 'Speak'.

In the Guided Access menu within Settings, choose 'Accessibility Shortcut' - This means that when you want to quickly turn Guided Access on and off, you just have to press the Home Button three times.

If you have any difficulties in using Guided Access, please use the following link to find Apple User Guides which contain full details of Accessibility Features:

<http://support.apple.com/manuals/>

Please note that accessibility features on electronic devices are updated regularly and therefore can change. This guide is designed to be as universal as possible for Apple devices but you may find slight differences depending on the operating system (or iOS) your device is using.

# Unit 3 – Magnification

## **Aim**

For pupils with vision impairments to confidently use in-built magnification accessibility features on an iPad in order to enable access to electronic text and images based on their individual needs.

## **Purpose**

Pupils will learn how to use the Zoom accessibility features of an iPad, developing their own preferences in use of features and gestures. They will also develop an understanding of when to apply these skills in order to access information in an electronic format through magnification.

## **Let's tailor it! - Baseline**

- What can they already do/explain? (Using the Skills Progression Checklist for Unit 4, baseline your pupil (B/L) to identify what skills they already have in order to progress through this unit.)
- What do they want to be able to do?
- What would their parent/carer like/need them to be able to do?
- What would their teacher like/need them to be able to do?

## Medium-Term Plan

### Outcome

The pupil can use the zoom accessibility features to successfully open and close the zoom menu, vary the magnification, quickly adjust the magnification, adjust a magnification window and pan around the screen in order to access increasingly more complex images and text using their own identified preferences.

Lesson	Lesson Outcome	Key Skills	Key Knowledge	Links to Other Units
Lesson 1: Introduction to Zoom	Select, open and adjust the magnification using the Zoom menu on request with at least the Home screen using the slide feature.	<ul style="list-style-type: none"> <li>• How to open the Zoom menu</li> <li>• How to use the Zoom slider</li> </ul>	<ul style="list-style-type: none"> <li>• What magnification is</li> <li>• How magnification can help to see images and text easier</li> </ul>	
Lesson 2: Introduction to Panning Around the Screen	Pan around the screen of a simplified image of an object or character to locate key features on request after applying the Zoom slider.	<ul style="list-style-type: none"> <li>• How to pan around the screen</li> </ul>	<ul style="list-style-type: none"> <li>• That magnified parts of an image are part of a whole</li> </ul>	
Lesson 3: Pan Around Multiple Images	Pan around the magnified screen to locate a named image from multiple images.	<ul style="list-style-type: none"> <li>• How to pan systematically</li> </ul>	<ul style="list-style-type: none"> <li>• That applying a systematic approach is more efficient</li> </ul>	Unit 5, Lesson 2

<p>Lesson 4: Comparing Methods to Activating Zoom</p>	<p>Compare panning around the screen using a three-fingered gesture to toggling with the zoom controller, identifying which method was the easiest to locate named information.</p>	<ul style="list-style-type: none"> <li>•How to toggle around the screen using the Zoom controller</li> </ul>	<ul style="list-style-type: none"> <li>•Similarities and differences between panning and toggling</li> <li>•Which methods suits their needs</li> </ul>	
<p>Lesson 5: Using Zoom to Track Along and Down Images and Text</p>	<p>Use the zoom accessibility feature to pan around a screen in order to locate and track text and images from the top to the bottom of the screen when it is magnified.</p>	<ul style="list-style-type: none"> <li>•Apply a systematic approach to toggle or pan along and down text and images</li> </ul>	<ul style="list-style-type: none"> <li>•How Zoom can help to access images and text presented in class</li> </ul>	
<p>Lesson 6: The Zoom Magnification Window</p>	<p>Compare locating named image or text using the magnification window to whole-screen magnification, identifying which method was the most preferable.</p>	<ul style="list-style-type: none"> <li>•Use and adjust a magnification window</li> <li>•Pan around the screen using a magnification window</li> </ul>	<ul style="list-style-type: none"> <li>•Similarities and differences between the magnification window and whole-screen magnification</li> <li>•Which method suits their needs</li> </ul>	

# iPad Accessibility Skills

## Unit 3 - Magnification

How to use Zoom	Progression		
Basic Skills	Introduce	Developing	Achieved
Use the shortcut Zoom menu to start and stop Zoom			
Use the slider to adjust magnification			
Use a panning gesture to move around the screen			
Use the three-finger double-tap gesture to magnify the screen			
Change the filter from the Zoom Controller menu			
<b>Intermediate Skills</b>			
Pan around the screen using the Controller			
Make the Zoom Controller easier to see			
Operate a Zoom window			
Resize the window			
Access the Zoom menu in the Accessibility Menu			
<b>Advanced Skills</b>			
Access advanced Zoom settings			

Set a maximum level of magnification			
Set Follow Focus			
Set Smart Typing			
Enable Keyboard Shortcuts			
Apply a Zoom Filter			
<b>Using Zoom with a pointer device</b>			
Zoom Pan			
Adjust Size with Zoom			

# iPad Accessibility Skills

## Unit 3 - Magnification

Using the Magnifier	Progression		
Basic Skills	Introduce	Developing	Achieved
Set up Magnifier using accessibility shortcut			
Set up Magnifier using Control Centre			
Turn on Magnifier (via Accessibility Shortcuts/Control Centre/Siri)			
Exit Magnifier			
Intermediate Skills			
Adjust magnification level			
Apply colour filters			
Invert colours			
Adjust Brightness (on supported iPad models)			
Adjust Contrast (on supported iPad models)			
Turn Flashlight on/off (on supported iPad models)			
Lock Focus (on supported iPad models)			
Advanced Skills			
Freezing images			
Freeze one image			
Freeze multiple images			
Save frozen images			

# Lesson 1: Introduction to Zoom

## Outcome

Select, open and adjust the magnification using the Zoom menu on request with at least the Home screen using the slide feature.

## Preparation

You will need to ensure the Zoom controller is on and visible.

## Key Vocabulary

Zoom menu, magnify

## Activity

Introduce the zoom accessibility menu as a shortcut on the main display. Discuss the best position of Zoom controller for pupil's use. Demonstrate opening the zoom menu and locating the zoom slide bar at the bottom of the menu. Model zooming in and out before encouraging the pupil to use the slider to adjust magnification and develop their own understanding of their needs in relation to the strength of magnification.

## Tailor It!

- Model using a triple-finger gesture to quickly adjust magnification, tailoring the maximum level of magnification to suit your pupil's visual needs. Compare this method to using the Zoom slider on the Zoom menu and encourage the pupil to identify their preference to activating Zoom.
- Try using a stylus or iPad crayon etc instead of using fingers to see if the pupil is more successful.

- If using a newer iOS version, change the Zoom menu's colour to suit the pupil.
- Explore the visibility of the Zoom menu and identify the pupil's visual preference i.e. 50%, 75%, 100% idle etc.

### **Let's Apply!**

- When could you use Zoom in the classroom or home environment?
- What other screens could you use this with?
- What is happening when you Zoom in? Why is this useful?
- What other equipment do you use that also magnifies?

### **Think SMART!**

- **S** – Which skills are you going to focus on today?
- **M** – How many occasions do you think the pupil could successfully zoom in and out of the screen on request?
- **A** – What level of scaffolding will the pupil need be able to achieve the outcome on this occasion?
- **R** – Can they access the Zoom controller slider with their functional vision or would the triple-finger gesture be more appropriate?
- **T** – Could the pupil achieve all of the above in one lesson successfully and accurately on most occasions? Do you need to split the lesson to cover a number of weeks to achieve?

# Instructions for Lesson 1: Using Zoom

In many apps, it is possible to zoom in and out of the screen using the finger pinch and spread gestures. However, this doesn't work with all of them and in such cases the inbuilt Zoom facility comes to the rescue. Most people will choose to magnify the entire screen (Full Screen Zoom), but you can also magnify part of the screen with a resizable lens (Window Zoom), or magnify a portion of the screen that stays in one place (Pinned Zoom). And, you can use Zoom together with VoiceOver.

## Setting up Zoom

If you are new to Zoom, it is strongly recommended that you have the Zoom Controller on (at least in the first instance) so that you can adjust the magnification quickly and easily. To do this, please follow the instructions below:

### Turning it on

- Tap on **Settings**
- Tap on **Accessibility**
- Tap **Zoom Controller**
- Tap **Show Controller**
- Adjust the Idle Opacity and colour
- Tap Zoom ON

### Putting onto Accessibility Shortcuts

- Tap on **Settings**
- Tap on **Accessibility**
- Tap on Accessibility Shortcut and select Zoom

## Using Zoom

With Zoom turned on:

- Tap the Zoom Controller and adjust the slider at the bottom of the menu to magnify the screen

Alternatively:

- Triple-tap the screen with 3 fingers.
- Drag the slider to the right to zoom in, and to the left to zoom out again.
- Drag 3 fingers to move round the screen
- Tap 'Zoom Out', or triple-tap the screen with 3 fingers to exit.

Or:

- Double-tap the screen with 3 fingers to magnify the whole screen. Keep your fingers on the screen.
- Without lifting your fingers, move them up or down to adjust the magnification. Once zoomed in, you can move around by dragging 3 fingers around the screen (or just one finger on some iPad models).
- Double-tap the screen with 3 fingers to zoom back out.

## Lesson 2: Introduction to Panning Around the Screen

### Outcome

Pan around the magnified screen of an image of an object or character to locate key features on request.

### Preparation

You will need a simple and clear image on screen accessible either through the Photos app or in Safari.

### Links to previous learning

Ensure the pupil is able to magnify the screen using either a triple-finger gesture and/or varying the amount of magnification using the slider in the Zoom controller menu.

### Key Vocabulary

Pan, magnify

### Activity

Present the pupil with a single clear and simple image. Ensure that the image is familiar to the pupil. Model panning around the image to locate a feature. Challenge the pupil to pan around the image in order to locate named features. Explore the difference in magnification to the size of the image. Continue to provide searching activities to locate features of a single image until the pupil is demonstrating more control in panning. Provide a range of increasingly detailed images and encourage the pupil to practise varying the magnification to identify the details.

## Tailor It!

- Images presented could be related to key vocabulary being taught in class.
- Use knowledge of the pupil's functional vision to present accessible images.
- Explore the range of filters and their effect from the Zoom menu to identify the pupil's preferences which they can then apply in order to distinguish features more easily.

## Let's Apply!

Discuss trouble-shooting if the pupil is presented with an inaccessible image in class by magnifying the screen and/or applying a filter.

- Explore a range of images and filters. Does it depend on the type of image presented?
- Can the pupil pan around a range of singular images?
- Can the pupil magnify the image presented in a number of different apps i.e. camera roll and Safari?

## Think SMART!

**S** – How many steps do you expect the pupil to do? How complex is the image?

**M** – How many features do you expect they will successfully find? How many times do you think they will be able to smoothly pan?

**A** – How much scaffolding do they need?

**R** - How smooth do you expect the pupil will be when panning? Can they move onto more complex images or do they need to practise with a lot of simple and clear images first?

**T** – Will they model smooth panning with a range of images quickly within a short number of lessons or will they need longer?

## Lesson 3: Pan Around Multiple Images

### Outcome

Pan around the magnified screen to locate a named image from multiple images.

### Preparation

You will need an electronic image with smaller images in rows with increasing spacing between them. Ensure that the images are of good quality and will not blur when magnified.

### Links to Previous Learning

Revise how to magnify the screen using the pupil's preferential method and pan around the screen.

### Key Vocabulary

Pan, magnify

### Activity

Initially present the pupil with multiple smaller, simple images in a predictable sequence i.e. in a horizontal row without much spacing between the images. Model using a systematic approach to pan along all of the images and identify these. Practise panning along the images, identifying them with gradually increasing control. Once the pupil is able to smoothly pan along the images, gradually increase the spacing between the images before increasing the complexity of the images. Then challenge the pupil to pan along vertical images before moving onto images in less predictable sequences.

## **Tailor it!**

- Remember to encourage the pupil to use their preferred method of magnifying the screen and panning around with their preferred fingers.
- Which filter do they need to use?
- Ensure the images selected are visually accessible for each pupil.
- Present the pupil with images which they would expect to access in class.

## **Let's Apply!**

- Encourage the pupil to apply their panning skills to locate apps on their Home screen. Does it make it easier to find them?
- Look for opportunities in class or at home to apply their developing panning skills in order to identify images or access details on the images more easily i.e. on a worksheet they have been given.
- In association with their developing camera skills, encourage the application of Zoom magnification to captured images. Compare this with using Magnifier (another accessibility tool) within the Camera app.

## **Think SMART!**

**S** – How much spacing is there? How are the images presented? Are they familiar images or not?

**M** – How many steps do you expect the pupil to be able to complete independently? How many lines do you expect them to pan along smoothly? How many images do you expect them to locate and/or identify?

**A** – How much scaffolding will they need?

**R** – How smooth do you expect the pupil will be when panning? Can they move onto rows of images with more spacing or do they need to practise with a lot of rows of images closer together? Do they need a lot of practise with more predictable rows first?

**T** – Will they model smooth panning with a range of smaller images quickly within a short number of lessons or will they need longer?

# Instructions for Lesson 3: Using the Magnifier

## Set up magnifier

### To add Magnifier to Accessibility shortcuts:

Tap on **Settings**  
Tap on **Accessibility**  
Turn Magnifier ON

### To add Magnifier to Control Centre:

Tap on **Settings**  
Tap on **Control Centre**  
Go to Customize Controls and tap on the '+' next to 'Magnifier'.

## Turn on the Magnifier

### via Accessibility Shortcuts:

Go into **Accessibility Shortcuts** by triple-clicking either the Home button or the Sleep/Wake key (at the top), depending on your iPad model and iOS.  
Tap on 'Magnifier'.

### via Control Centre:

Swipe down from the top right-hand side of the iPad screen to bring up Control Centre.  
Tap on the Magnifier icon

### via Siri


Press down the Home Key, or bring up Siri by saying "Hey Siri".  
Say something like "turn on Magnifier"

**To exit magnifier:** press the Home button or swipe up from the bottom of the screen.

## Adjust magnification level

Within Magnifier, drag the Zoom level slider up or down, or left or right (depending on your iPad model).

## Apply colour filters

- Within Magnifier, tap on colour options icon: 
- The 2 slides allow you to adjust for brightness (sun icon) and contrast.
- You can also change your magnified image's colours to Red/Black, Yellow/Black, Greyscale, Yellow/Blue, and White/Blue. Horizontally scroll through the word menu above the sliders to select (the current option will be in yellow).
- To apply changes and return to Magnifier, tap the colour options icon again.

## Invert colours

Within Magnifier, tap on the colour options icon.


Tap on the invert icon .

To apply changes and return to the Magnifier, tap the ??invert colours icon again.

## Add more light (some models only)

Within Magnifier, tap the lightening flash or torch icon to turn the flashlight on. Tap it again to turn it off.


## Lock focus

While in Magnifier, tap the padlock icon  to lock the focus. Tap it once more to unlock focus.

## Freezing Images



Magnifier is typically used to do active work. However at times you might want to do more extended work with a Magnified image, and you do this by 'freezing'.

### Freeze one image

- While in Magnifier, tap the white shutter button 
- The image will stay on the iPad screen and you can zoom into it and move around within it.
- Tap the shutter button again to unfreeze image. Ensure you are zoomed out as far as you can be otherwise you won't see the button.

### Freezing multiple images (only available on some models)

- Freeze one image, as above.

- When you are ready to take another image, tap the multiple-frames icon  Reposition the camera and take your shot using the plus icon .

You can do this as many times as you want.

To view your images:

- Tap View, and then tap on the frames you want to see.
- Tap End to return to the live magnifier.

### **Saving frozen images**

Frozen images will not automatically be saved on your iPad or in the iCloud. You will need to direct the iPad to do this.

- When in a frozen image, tap and hold your finger on the screen to bring up a sub-menu
- Tap 'Save Image'.

Alternatively, tap on Share. This allows you to Save to Files and thus decide exactly where you want the image to be stored. Don't forget to confirm your selection by tapping Save.

## Lesson 4: Comparing Methods to Activating Zoom

### Outcome

Compare panning around the screen using a gesture to toggling with the Zoom controller, identifying which method was the easiest to locate named images.

### Preparation

You will need an image prepared in the Photos app or in Safari which initially replicates earlier successful magnification activities as well as images which matches the pupil's current skill level of panning i.e. multiple smaller images in horizontal or vertical rows. You need to ensure the Zoom menu is visible to the pupil and in the pupil's preferred part of the screen.

### Links to Previous Learning

Revise how to pan around the screen using the appropriate gesture with rows of images.

### Key Vocabulary

Panning, Zoom controller, toggling

### Activity

Introduce toggling around the screen by sliding the finger under the Zoom menu when magnification is enabled. Encourage the pupil to toggle up and down and then left to right using the Zoom menu to locate and identify simplified images before moving onto multiple smaller images in different arrays.

Compare how the level of magnification effects how much toggling is required. Encourage the pupil to identify their preferred method of panning around the whole screen. Can they explain why they prefer it?

### **Tailor it!**

- Present the pupil with images which match their skill in panning around the screen.
- Remember to use the pupil's preferred presentation of the Zoom menu i.e. colour and visibility.
- If the pupil quickly identifies a preference for one way of panning rather than the other, tailor the rest of the lesson to practise panning using that way.

### **Let's Apply!**

- Encourage the pupil to utilise their preferred panning method to access a range of images within the classroom and home environment (ensuring that key staff and family members are aware and confident in using this method too).
- Provide increasingly more complex images and multiple images which continue to be of an appropriate level of accessibility for each pupil.
- Ensure the pupil has opportunities to use their preferred method in a range of appropriate apps.

### **Think SMART!**

**S** – What kind of images are you expecting the pupil to access in order to compare methods?

**M** - How do you expect the pupil to identify their preferred method?

**A** – How much scaffolding does the pupil need to achieve the outcome?

**R** - Is the pupil able to compare methods or is the focus more on how confidently they are able to pan along images using both methods?

**T** – Does the pupil require one lesson to compare methods or does the pupil need a few lessons to become familiar with toggling using the Zoom controller before making a decision?

# Instructions for Lesson 4: Zoom Controller

The Zoom Controller is an icon consisting of a small black and white circle and arrows which sits permanently and discretely on the iPad screen, and provides quick and easy access to the Zoom commands.

## How to turn it on:

Method 1 (via the Accessibility menu):

- Tap on **Settings**
- Tap on **Accessibility**
- Tap on Zoom
- Go to Zoom controller and turn ON 'Show Controller'

Method 2 (via Accessibility Shortcuts):

- Triple-tap the Home button to bring up menu
- Tap on Zoom
- A message will tell you that Zoom is Enabled, and you will be able to see the Zoom Controller

## How to use it:

- Double tap Zoom control button (at its centre) to Zoom in or out
- Single tap Zoom control button to display controls
- When you are zoomed in, use the Zoom Controller to move around the screen like a joystick. Lightly move your finger over the controller and drag to pan around the whole document.

## How to make Zoom Controller easier to see

- Tap on **Settings**
- Tap on **Accessibility**
- Go to Zoom
- Select Idle Opacity / Idle Visibility and use the slide to adjust how visible the Controller is when it's not in use.

You can also move the Zoom Controller to wherever you want it on the iPad screen by dragging it with one or two fingers.

# Lesson 5: Using Zoom to Track Along and Down Images and Text

## Outcome

Use the Zoom accessibility feature to pan around a screen in order to locate and track text and images from the top to the bottom of the screen when it is magnified.

## Preparation

You will need multiple lines of images of an appropriate level of detail for the pupil and multiple lines of text.

## Links to Previous Learning

Revise the pupil's preferred panning method. How does the pupil think they move down to the next line?

## Key Vocabulary

Pan

## Activity

Begin by tracking along motivational images from far left to right whilst using the pupil's preferred panning method. Model how to move down and locate the beginning of the next line of images before encouraging the pupil to practise this skill. Once the pupil is demonstrating competency in panning from top left to bottom right, introduce text. Develop panning skills in order to access text when the screen is magnified from being able to track along a single line of text to tracking from top left to bottom right. Provide guidance to encourage the pupil to identify when text is too small to access and it is appropriate to apply Zoom.

## **Tailor It!**

- Present text at the pupil's reading level i.e. CVC words or more complex sentences, remembering to start simply to develop the pupil's confidence initially e.g. begin with lines of single letters before moving onto CVC words.
- Present text in a format which represents everyday tasks the pupil will need to access i.e. worksheets or textbooks but remember to apply strategies where appropriate from results of functional vision assessment to ensure the pupil can be successful.
- Ensure the pupil is using the level of magnification that gives them the most access.
- The pupil may require additional steps to successfully pan down to the next line i.e. guiding dots. Utilise techniques usually used when introducing hand-held magnifiers if required.

## **Let's Apply!**

- Provide opportunities for the pupil to access text which is too small for them. Encourage them to identify this in line with their preferred computer font size and apply Zoom.
- In line with their developing camera skills, provide opportunities for the pupil to take photos of inaccessible text presented to them and apply Zoom as a problem-solving technique.
- Encourage the pupil to apply their panning skills to access text in a number of apps using magnification.

## **Think SMART!**

**S** – What type of images and text do you expect the pupil to access?

**M** – How many lines do you think the pupil will pan along and down successfully with? On how many occasions will the pupil pan along smoothly?

**A** - How much scaffolding does the pupil need?

**R** – Would the pupil be able to apply their panning skills to pan down multiple lines of text or will they need to practise with images first?

**T** – Will the pupil be able to apply their panning skills to access multiple lines of images and text within one lesson or will they need to achieve this over multiple lessons?

## Lesson 6: The Zoom Magnification Window

### Outcome

Compare locating named image or text using the magnification window to whole-screen magnification, identifying which zoom region was the most preferable.

### Preparation

You will need multiple lines of images of an appropriate level of detail for the pupil and multiple lines of text.

### Links to Previous Learning

Revise panning along and down multiple rows of images and/or lines of text.

### Key Vocabulary

Zoom Region, Full Screen Zoom, Window Zoom

### Activity

Introduce the Zoom window option, exploring the difference between this and magnifying the whole screen. Explore moving the window around the screen by toggling with the Zoom menu or using fingers, encouraging the pupil to identify their preferred method. Repeat the activity above but using the window feature. Develop the pupil's knowledge of when it would be more appropriate to use full screen magnification or window magnification.

## **Tailor it!**

- Vary the size of the magnification window to identify the pupil's preference.
- Use the pupil's preferred method of panning around the screen using the Zoom menu or fingers.
- Utilise the filter option within the Zoom window to replicate the pupil's filter preference.

## **Let's Apply**

- Encourage the pupil to utilise their preferred zoom region to access a range of images within the classroom and home environment (ensuring that key staff and family members are aware and confident in using this method too).
- Provide increasingly more complex images and text which continue to be of an appropriate level of accessibility for each pupil.
- Ensure the pupil has opportunities to use their preferred method in a range of appropriate apps.

## **Think SMART!**

**S** – What kind of images and/or text are you expecting the pupil to access in order to compare methods?

**M** - How do you expect the pupil to identify their preferred method?

**A** – How much scaffolding does the pupil need to achieve the outcome?

**R** - Is the pupil able to compare methods or is the focus more on how confidently they are able to pan using both methods?

**T** – Does the pupil require one lesson to compare methods or does the pupil need a few lessons to become familiar with using the window magnification tool before making a decision?

# Instructions for Lesson 6: Part-Screen Zoom Options

Apart from using Zoom to magnify the entire iPad screen, you can also use it to magnify either just a window, which can be moved around the screen as necessary, or else to magnify just one particular, static part of the screen via Pinned Zoom.

To choose which region to magnify:

- Triple tap with three fingers (or single tap the Zoom Controller).
- Click on Choose Region and tap on your preference.

This can also be done via the Zoom menu in the Accessibility app.

## **Window Zoom**

This option provides a rectangular window within which you can see the zoomed text.

## **Resize window**

- you can resize by tapping on the Zoom Controller, or else triple-tapping on the screen with 3 fingers to make the Zoom menu appear.
- Tap on 'Resize Lens', and then drag your fingers on the small circles surrounding the zoomed window to change the size.
- Once you have finished resizing, just tap outside the window to come out.

## **Move window**

- Drag the handle at the bottom of the Zoom lens. Let go when it is where you want it.

Otherwise, you can drag 3 fingers left, right, up or down anywhere on the screen.

## **Advanced Zoom settings**

Advanced Zoom settings are available in the Zoom menu within Accessibility:

- Tap **Settings**
- Tap **Accessibility**
- Go to Zoom.

These allow you to:

- **Set a maximum level of magnification:** Use the slider at the bottom of the screen to set the greatest magnification for Zoom.
- **Set Follow Focus:** this has the Zoom focus on your selections, the text insertion point, and your typing.
- **Set Smart Typing:** this makes the iPad switch to Window Zoom when a keyboard appears.
- **Enable *Keyboard Shortcuts*:** this allows you to control Zoom using shortcuts on an external keyboard.
- **Apply a *Zoom Filter*:** this changes the way that the zoomed screen is displayed. 'Inverted' reverses the colours to enhance contrast; 'Greyscale' changes the screen to only shades of grey, and 'Greyscale Inverted' is the Greyscale version of Inverted. The 'Low Light' option makes no change to colour, but instead dims the screen which can be useful when environmental light levels are low.

### **Using Zoom with a pointer device**

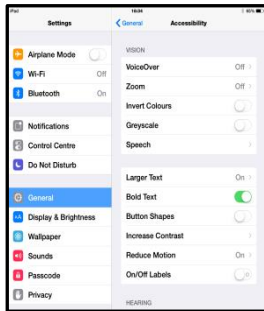
If you use iPad with a pointer device, you can also set the following below Pointer Control:

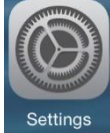
**Zoom Pan:** Choose Continuous, Centred, or Edges to set how the screen image moves with the pointer.

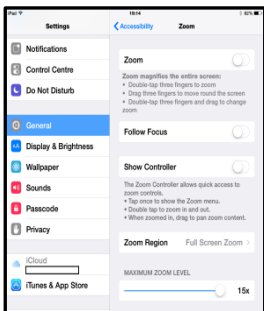
**Adjust Size with Zoom:** Allow the pointer to scale with zoom.

## How to use Zoom – An Apple Magnification Feature

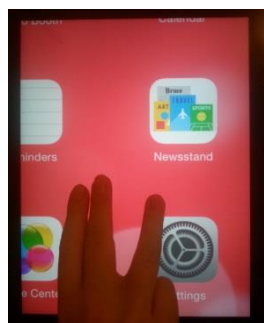
This quick start guide is designed to help you get started using the Apple accessibility feature called Zoom which is a magnifier.



**Step 1:** To turn on Zoom, go to settings , select General on the left-hand side menu and locate Accessibility from the right-hand side. Zoom is the second option in the Accessibility menu. This will take you to the Zoom feature options screen.



**Step 2:** Tap the button to the right of 'Zoom' at the top of the right-hand screen to turn on Zoom. This should turn the button green (unless you have changed the display screen features). **Until you are familiar with Zoom, always ensure that 'Full Screen Zoom' is selected in the Zoom menu called 'Zoom Region'.**



**Step 3:** There are now a number of different ways to operate the Zoom Accessibility feature. This is so Zoom can be customised for the individual.

- A. The first way is to tap three fingers on the screen two times (double-tap) to zoom in. This will magnify the whole screen. If you keep your fingers on the screen and move them up or down, this will adjust the magnification. Once zoomed in, you can move around the screen by placing three fingers on the screen and dragging them around the screen. Depending on which Apple operating system you use, you may also be able to move around the screen using one finger. Once you have finished, double-tap on the screen with three fingers to zoom back out.



- B.** The second way to operate Zoom is by tapping the screen three times (triple-tapping) with three fingers. A small menu will appear. Depending on how far along the slider is at the bottom of the small menu, when you select 'Zoom In' the screen will be magnified by that amount. You can then move your finger along the slider at the bottom of the Zoom menu to adjust the amount of magnification before double tapping on the screen with three fingers to make the menu disappear.



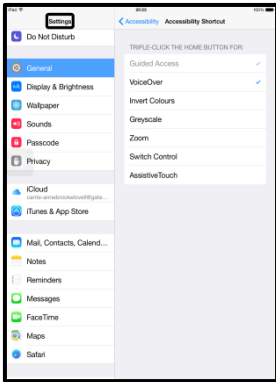
By selecting 'Choose Filter' using the Zoom menu, you can change the way the screen is displayed. 'Inverted' reverses the colours to enhance contrast. 'Greyscale' changes the colour on the screen to shades of grey. 'Greyscale Inverted' is very similar to 'Inverted' but only uses shades of grey. 'Low Light' significantly dims the screen.



- C.** The third way to operate Zoom is by using a Zoom controller. This can be located either by choosing to 'Show Controller' in the small menu as in part 3B above or in the Zoom menu within Settings (see step 1). Once this is selected using either method, a small black circle with a white circle and arrows will appear. Within the Zoom menu in Settings you can adjust how visible the Zoom controller is when it is not in use by selecting 'Idle Visibility' under the 'Show Controller' option. Sliding your finger on the slider to the left will decrease visibility and to the right will increase visibility. You can also move the Zoom Controller to wherever you want it to be on the screen by dragging it with one or two fingers.



Once you have set up the Zoom Controller it operates in the same way as described in step 3B when you tap on it with one finger, except that once you have zoomed in on the screen, you can use the Zoom Controller to move around the screen like a joystick. To do this, you rub your finger over the Zoom Controller (like a little stroke). The circle enlarges and the small circle in the middle moves where your finger moves. You can move quickly by moving the circle to the up, down, left or right arrow or slowly by moving the circle towards (not next to) the arrows.



**Step 4:** So far you have used the Zoom feature to magnify the whole screen. However, you can also magnify part of the screen in a 'window' while keeping the rest of the screen at its usual magnification. Again, there are a number of ways to do this. You can use the 'Window Zoom' by selecting it in the Zoom Controller menu (see step 3B), in the small menu (see step 3C) or within the Zoom options of the Accessibility menu within Settings called 'Zoom Region'. Once 'Zoom Window' is selected and you have zoomed in, a rectangular shaped window will appear and the screen within this will be magnified. This can be re-sized to suit your needs by tapping on the 'Zoom Controller' or triple-tapping on the screen with three fingers to make the Zoom menu appear. Select 'Resize Lens' and drag your fingers on the 8 small circles around the rectangular window to re-size. Once you have resized the 'Zoom Window', tap anywhere outside of the window to save this.



To move around the screen within the 'Zoom Window', drag three fingers left, right, up or down' anywhere on the screen. Alternatively, by tapping and keeping your finger on the small white tab at the bottom of the 'Zoom Window' (the handle) you can move the window around the whole screen. Tapping this once with one finger will also bring up the small Zoom menu. If you select 'Choose Filter' as described in Step 3B and filter, the filter will only apply to the window. When you have finished, open the Zoom menu and select 'Zoom Out'.

#### **Other useful hints include:**

In the Zoom menu within Settings, choose 'Follow Focus' – This feature enables you to use the onscreen keyboard at 1x magnification and it magnifies the text being typed. When you select 'Follow Focus', a second option 'Smart Typing' appears. If you then select 'Smart Typing', a magnification window will appear when you use a keyboard so that text is magnified but the keyboard is not. Please note that older versions of iOS may have 'Zoom Keyboard' instead which means that both the main screen and the onscreen keyboard are magnified.

In the Zoom menu within Settings at the bottom adjust Maximum Zoom Level - This will adjust the maximum amount of zoom available for the whole screen or magnification window.

If you have any difficulties in using Zoom, please use the following link to find Apple User Guides which contain full details of Accessibility Features:

<http://support.apple.com/manuals/>

Please note that accessibility features on electronic devices are updated regularly and therefore can change. This guide is designed to be as universal as possible for Apple devices, but you may find slight differences depending on the operating system (or iOS) your device is using.

# Unit 4 – Accessing Text

**Aim:** For pupils with vision impairments to utilise the accessibility features Spoken Content and/or VoiceOver (depending on levels of functional vision) as well as an app designed for pupils with vision impairments in order to access print in their preferred format in a range of apps off and online.

**Purpose:** Due to the majority of pupils with vision impairments requiring modified large print and/or Braille, by learning a range of strategies to access print in an electronic format both off and online pupils will expand their access a wide range of information.

## Let's tailor it! - Baseline

- What can they already do/explain? (Using the Skills Progression Checklist for Unit 5, baseline your pupil (B/L) to identify what skills they already have in order to progress through this unit.)
- What do they want to be able to do?
- What would their parent/carer like/need them to be able to do?
- What would their teacher like/need them to be able to do?

## 4A. Spoken Content and EasyReader

### Outcome

The pupil will be able to apply the Speak Selection function to access words and phrases within appropriate apps, comparing this to Speak Screen using their preferred activation method and the EasyReader or an OCR app.

### Medium-Term Plan

Lesson	Outcome	Key Skills	Key Knowledge	Links to Other Units
Lesson 1: Introduction to Speak Selection	Apply Speak Selection in order to access words presented in an electronic format.	Activate Speak Selection	Understand how Speak Selection can support access to reading words	Unit 2: Lesson 1
Lesson 2: Using Speak Selection to Access Multiple Lines	Apply Speak Selection in order to access multiple lines of text presented in an electronic format.	Activate Speak Selection Highlight multiple lines of text backwards and forwards	Understand how Speak Selection can support access to reading multiple lines of text	Unit 2: Lesson 1
Lesson 3: Comparing Methods of Activating Speak Screen	Compare applying the Speak Screen gesture in order to access pages of text in an electronic format on and offline, pausing and adapting speed on request to using the Speech Controller and	Use the appropriate gesture to activate Speak Screen Use the Speak Screen menu Activate Speech Controller Use Speak on Touch	Understand the purpose of Speak Screen to access the whole page Understand the similarities and differences between Speak Screen and the Speech Controller	

	identify their preference.			
Lesson 4: EasyReader and OCR	The pupil can access texts in EasyReader and/or an OCR app, utilising inbuilt options in order to suit their needs.	Locate and open EasyReader/ OCR app Use the EasyReader/ OCR controls Locate the menus	How EasyReader and OCR can help them to access texts Which options suit their vision needs	

# iPad Accessibility Skills

## Unit 4 - Accessing text

Spoken Content	Progression		
Speak Selection	Introduce	Developing	Achieved
Select text and locate speak from menu to read a word			
Use a drag gesture to highlight text			
Turn Speak Selection on and off from the Accessibility menu			
Adjust speaking rate			
Speak Screen			
Activate Speak Screen using a gesture			
Activate Speak Screen using Siri			
Activate Speak Screen using the button			
Pause and stop Speak Screen using the control			
Adjust speech speed			
Turn Speak Screen on and off from the Accessibility menu			
Advanced Spoken Content Skills			
Typing feedback			
Configure typing feedback (hear each character/word and typing predictions)			
Turn on Speak Autotext			
Hear typing predictions			
Personalise Spoken Content (voice/speaking rate/highlighted words as read)			

# iPad Accessibility Skills

## Unit 4 - Accessing Text

iBooks	Progression		
Basic Skills - Move around within audiobooks	Introduce	Developing	Achieved
Skip forward or back			
Change speed of speech			
Set a sleep timer			
Go to a chapter			
Go to a specific time			
<b>Move around within books</b>			
Page turn			
Go to previous page/specific page			
Close book			
<b>Intermediate Skills</b>			
<b>Change book appearance</b>			
Adjust screen brightness			
Change font and font size			
Change page background colour			
Automatically adjust page colour and brightness in low-light conditions			
Turn on vertical scrolling			
<b>Marking up the text</b>			
Add a bookmark			

Highlight or underline text			
Add a note			
Share a selection of text			
Find and buy books and audiobooks			
<b>Advanced Skills</b>			
<b>Organise books in the books app</b>			
Create a collection			
Add to the collection			
Sort books in your collection/library			
<b>Use the books app to access PDFs</b>			
Open/Share/Print PDF			
Mark up PDF			
Remove books/audiobooks/PDFs			

# iPad Accessibility Skills

## Unit 4 - Accessing Text

Dolphin EasyReader	Progression		
Basic Skills	Introduce	Developing	Achieved
<b>Navigate through the book</b>			
Using a single tap to play and pause			
Using a swiping gesture to turn the pages			
Using the Next and Previous buttons			
Find and open books			
<b>Intermediate Skills</b>			
<b>Using My Books list</b>			
Find out more information about a book			
Search for an author of a title			
Sort your books			
Choose how to view your list			
<b>Change the appearance of your text</b>			
Text size			
Text font			
Change text spacing			
Change text background and highlight colours			
<b>Change speech settings</b>			

Change sound			
Change pitch/volume/add pauses			
Choose different voice			
<b>Advanced Skills</b>			
<b>Navigate through the book</b>			
Using a single tap			
Using the Next and Previous buttons			
Navigate to a specific heading/page/bookmark			
Navigate using the progress slider			
<b>Go to a bookmark</b>			
Add a bookmark			
Find your bookmark			
<b>Initial set up</b>			
Create Dolphin account			
Sign into Bookshare			

# iPad Accessibility Skills

## Unit 4 - Accessing Text

OCR - Microsoft	Progression		
Basic Skills	Introduce	Developing	Achieved
<b>How to use Lens</b>			
Choose what to capture			
Take the picture			
Review and edit			
<b>Intermediate Skills</b>			
Save and share image			
Listen to any text within your image immediately (Immersive Reader)			
<b>Using the Narrator</b>			
Listen to the text			
Pause Play			
Skip forward or back			
Change voice options			
<b>Change how text looks in Immersive Reader</b>			
Change size and font			
Change spacing			
Change colour themes			
Show windows of text at a time			

<b>Advanced Skills</b>			
<b>i) Emerging literary options</b>			
Picture dictionary			
Highlight syllables in words			
Highlight parts of speech			
<b>ii) Accessibility</b>			
Use MS Lens with Accessibility features			

# Lesson 1: Introduction to Speak Selection

## Outcome

Apply Speak Selection in order to access words presented in an electronic format.

## Links to Previous Learning

Ensure that the pupil has successfully completed the appropriate gesture (single-finger single tap and single-finger tap and hold) Lesson 1 from Unit 2 prior to this lesson to ensure they can apply appropriate gestures.

## Preparation

Prepare an electronic text in an appropriate app i.e. iBooks, Word, Pages etc. There are instructions which follow on using an OCR app which can be used to support with this task.

## Key Vocabulary

Speak Selection

## Activity

Introduce the pupil to the Speak Selection function, encouraging them to identify when this could be useful i.e. to access unfamiliar words. Discuss how access to electronic texts can enable access to print for the pupil. Model highlighting an individual word before providing guidance in order for the pupil to highlight named words and use the onscreen menu to select the speak option when reading a prepared, motivating text. Practise activating Speak Selection with more accuracy using unfamiliar words.

## **Tailor It!**

Present text at the pupil's reading level i.e. CVC words or more complex sentences, remembering to start simply to develop the pupil's confidence initially e.g. begin with lines of single letters before moving onto CVC words.

Ensure the pupil's specified electronic print size, spacing etc is used when creating documents electronically for the pupil to access.

Modify the amount of print presented on the page.

Explore the 'Highlight Content' option in the Setting menu to highlight words, sentences or words and sentences in the pupil's preferential highlight style and colours.

Adjust the speaking rate in the Settings menu to the pupil's preference.

## **Let's Apply!**

- Encourage the pupil to apply Speak Selection to check and edit their own text i.e. in Notes or Pages.
- Develop competency in locating the iBooks app and opening a motivating text from the bookshelf and/or list of titles before using Speak Selection to read words.
- Encourage the pupil to identify and apply their own ideas about when Speak Selection could help them within the classroom or home environment.
- Support the pupil to transfer activating Speak Selection to other appropriate apps i.e. Notes, iBooks or Pages.

Explore 'Define' in the options bar for words the pupil is unfamiliar with. Compare this to using Siri in order to define words and encourage the pupil to identify their preferred method.

If appropriate, demonstrate where the Speak Selection menu can be located within the Settings menu.

## **Think SMART!**

**S** – Do you expect the pupil to apply Speak Selection to familiar and unfamiliar words?

**M** – Within how many attempts do you expect the pupil to activate Speak Selection? How many words do you expect to be read out?

**A** - What level of scaffolding will the pupil need be able to achieve the outcome on this occasion?

**R** - Can they visually access the options bar in order to select the word? Are they confident in using a tap and hold gesture? (If not, then please refer to Lesson 1, Unit 2 to practise this skill further).

**T** – How long will it take your pupil to confidently acquire this skill and understand how it can be utilised i.e. one or multiple lessons?

# Instructions for Lesson 1: Using Speak Selection

For those pupils who do not want to use VoiceOver, the iPad offers a variety of ways to support pupils by speaking selected text, screens and also providing typing feedback.

## **Speak Selection**

In Speak Selection, the iPad will only speak that part of the screen that you select.

### **Turn on Speak Selection**

- Tap on **Settings**
- Tap on **Accessibility**
- Go to Spoken Content
- Tap Speak Selection ON.

### **Use Speak Selection**

- Go to your text document
- Double-tap at the start of the section you want to be read out to you.

This will bring up an edit menu (at the top). You will also notice that the word you have double-tapped on will be highlighted. Small circles can be seen at the top left and bottom right of the highlighted box.

- Drag either circle so that the highlighted area covers the text you want spoken.
- Tap on **Speak**
- When finished, tap anywhere else within the document to de-select your text.

Speech can be paused and adjusted as previously.

## Using Typing Feedback

An extremely useful feature for pupils, Typing Feedback allows you to adjust what is spoken. You can choose to have the iPad speak each character or each word. You can also ask for it to identify Auto-text, text put in automatically by the iPad that you might otherwise be unaware of: auto-corrections and auto-capitalisations.

To turn on and customise Typing Feedback:

- Tap on **Settings**
- Tap on **Accessibility**
- Go to Spoken Content
- Tap on Typing Feedback to take you to the Typing Feedback menu. Here, you can select what feedback you would like to hear, whether you want to hear each character or just each word, and whether you want to hear the Auto-text.

Spoken Content can also provide you with help – Character Hints (helpful for early spellers) and the option to tap and hold each word to hear typing predictions (when typing predictions have been enabled).

## Spoken Content

Spoken Content is when the iPad speaks a selection of text.

### Turn on Spoken Content

- Ensure the iPad is not on mute.
- Tap **Settings**
- Tap **Accessibility**
- Go into Spoken Content
- Tap Speak Selection ON

### How to select text to be read

- Select text by holding finger on text and moving the markers to surround the text you want to hear.
- Tap 'Speak'

## **Personalise Spoken Content**

The Spoken Content menu within Accessibility provides a variety of ways to personalise Spoken Content to suit your pupil's needs.

### **Choose voice**

Go into Voices

Choose language and try some of the options.

### **Adjust speaking rate**

Go to the Speaking rate option and tap.


Move the slider along to adjust speed.

### **Highlighted words as they are read**

Tap ON Highlighted Content button.

# Instructions for Lesson 1: The iBook App

## Using the iBooks app to find and buy books and audiobooks

- Tap on **iBooks** 
- Tap Book Store or Audiobooks to browse titles. If you are looking for something specific, tap on Search to use the Search function.
- Tap on a book cover to learn more about it, preview the books, or put it on you 'Want to Read' list.
- Tap Buy to purchase a title. Money will be taken from the account associated with your Apple ID. Alternatively, if the book is free, just tap Get to download it.

## Reading books and audiobooks

- Tap on **Books**
- To return to a book you are in the middle of reading, tap on the 'Reading Now' tab at the bottom. In this screen, you can scroll down to see books and audiobooks in your 'Want to Read list', to set reading goals and to see the record of books that you have already read.
- To see all the books, audiobooks, series and PDFs in your library, tap on Library.
- To read a book, simply tap the Reading Now or Library tab, then tap a cover to open a book.

## Moving around within audiobooks


### Skip forward or back

You can touch and hold the rounded arrows. Alternatively, slide and hold the book cover. You may also be able to use headphone controls.

Note: To change the number of seconds that skipping advances, go to Settings > Books, then scroll down to Audiobooks.

**Change speed of speech:** tap the playback speed in the lower-left corner.

**Set a sleep timer:** Tap , then choose a duration.

**Go to a chapter:** Tap , then tap a chapter.

Note: Some audiobooks refer to chapters as tracks, or don't define chapters.


**Go to a specific time:** Drag the playhead, directly below the audiobook cover. The point where you started listening is marked with a grey circle on the timeline. Tap the circle to jump back to that spot.


## Moving around within books

Use the following gestures:


**Page turn:** Tap the right side of the page or swipe right to left.

**Go to previous page:** Tap the left side of the page. Otherwise swipe left to right.

**Go to a specific page:** Tap the page and move the slider at the bottom of the screen left or right. Alternatively, tap the search icon , enter a page number, then tap the page number in the search results.

**Close a book:** Tap the centre of the iPad screen to bring up the controls. Then tap the close app .

## Change book appearance

- Tap on **Books**
- Go into the book you would like to read.
- Tap the page
- Tap the text icon 

Options to change the book's appearance include:

**Adjusting screen brightness:** Drag the slider left or right.

**Changing font size:** Tap the large A to increase the font size or tap the small A to decrease it.

**Change the font:** Tap Fonts to choose a different font.

**Change the page background colour:** Tap a coloured circle.



**Automatically adjusting page colour and brightness in low-light conditions:** Turn on Auto-Night Theme. (This is not supported by all books).

**Turning on Vertical scrolling:** this allows you to scroll continuously through your book rather than turn each page.


## Marking up the text

### Add a bookmark


Although you will automatically be returned to the page you finished on, you might want to add a bookmark or two so that you can return to a part of the book again.

- Tap the bookmark icon  to add a bookmark. Tap it again to remove the bookmark.
- To see all your bookmarks, tap menu icon , then tap Bookmarks.

### Highlight or underline text

- Within a Book, touch and hold a word, then move the grab points to adjust the selection.
- Tap Highlight, then tap  to choose a highlight colour or underline.
- To remove a highlight or underline, tap the text, then tap the bin icon.
- To see all of your highlights, tap menu icon and then Notes.

### Add a note

- Within a Book, touch and hold a word, then move the grab points to adjust the selection.
- Tap Note, then enter note text.
- Tap the page to close the note and continue reading.
- To see all of your notes, tap menu icon , then tap Notes. Swipe left on a note to delete it.

## Sharing a selection of text

Useful for school work, you can send blocks of text to others using Mail or Messages, or copy and paste a selection into Notes. (Sharing may not be available in all countries or regions.)

- Within a book, tap and hold a word. Move the grab points so that they surround your whole selection.
- Tap Share, then choose a method.

(This is not available in all countries or regions.)

## Organizing books in the iBooks app

The iBooks app will automatically sort your books into Collections: 'Audiobooks', 'Want to Read' and 'Finished', but you may wish to create Collections of your own.

### Create a Collection

- Tap on iBooks.
- Tap on Library
- Tap on Collections
- Then tap New Collection. Give your collection a name, then tap Done.


### Add Books to a Collection

In the iBooks app, tap  below the book cover.

Tap Add to Collection, and then choose which collection to add it to.


*You can add the same book to multiple collections.*

### Sort books in your library/in a Collection


- In the iBooks apps, tap on Library or go to a particular Collection.
- Scroll down and tap next to Sort or Sort By.
- Choose Recent, Title, Author, or Manually by tapping on your selection. If you choose Manually, you will need to touch and hold a book cover, and then drag it to the position you want.
- Tap  to view books by title or cover.

## Using the iBooks app to access PDFs

As well as books, the iBooks app is a really useful way to read PDF documents.

**Open a PDF:** Tap the PDF attachment to open it, tap the Upload icon , then tap iBooks.

**Share or print a PDF:** Open the PDF document, tap Upload, then choose a share option such as AirDrop, Mail, or Messages, or tap Print.

**Mark up a PDF:** open the PDF and tap on the pen icon  to use the drawing and annotation tools (tap near the centre of a page if you don't see this icon).

## **Remove books, audiobooks, and PDFs**

You can remove books, audiobooks, and PDFs from Reading Now and your library collections, or hide them on your iPad.

Tap Library, then tap Edit.

Select an option (i.e. delete, hide)

For audiobooks, tap Library, then go to the Audiobooks collection.

Tap the items you want to remove.

Tap the bin icon and select an option.

## Lesson 2: Using Speak Selection to Access Multiple Lines

### Outcome

Apply Speak Selection in order to access multiple lines of text presented in an electronic format.

### Links to Previous Learning

Revise activating Speak Selection to read out individual words, ensuring the pupil is demonstrating competency in highlighting individual words within a few apps.

Ensure the pupil has successfully completed the appropriate gestures from Lesson 1, Unit 2 (single-finger single tap, single-finger tap and hold, single-finger tap and drag from left to right and right to left).

### Preparation

Prepare an electronic text in an appropriate app i.e. iBooks, Word, Pages etc.

### Key Vocabulary

Speak Selection

### Activity

Model applying a tap and drag gesture from left to right across a line of text before requesting Speak Selection to read the line, discussing when this may be preferable to reading single words only. Extend to sentences, multiple lines of text and paragraphs. Provide graduated verbal guidance for the pupil to activate Speak Selection, drag the highlighter initially forwards and then backwards before selecting 'Speak'. Discuss when this feature could be useful for reading tasks both within the classroom environment and at home.

## Tailor it!

- Explore if the 'Highlighting Text' option in the Settings menu would benefit the pupil.
- Explore which voice the pupil prefers.
- Does the pupil prefer all of the page read out to them? Introduce the 'Select All' feature before selecting 'Speech' and explore this method too before the pupil identifies which method they prefer.
- Work with the pupil to identify particular times of the day, lessons etc. when utilising this feature may help to alleviate visual fatigue.
- Explore the 'Highlight Content' option in the Setting menu to highlight words, sentences or words and sentences in the pupil's preferential highlight style and colours.
- Adjust the speaking rate in the Settings menu to the pupil's preference.

## Let's Apply!

- Provide texts in iBooks for the pupil to access based on in-class topics to practise Speak Selection. Extend this use at home if possible.
- Apply Speak Selection in order to read search results in Safari.
- Encourage the pupil to identify and apply their own ideas about when Speak Selection could help them within the classroom or home environment.
- Support the pupil to transfer activating Speak Selection to other appropriate apps i.e. Notes, iBooks or Pages.

**S** – What kind of text do you expect the pupil to apply Speak Selection to?

**M** – Within how many attempts do you expect the pupil to activate Speak Selection? How many lines, sentences, paragraphs do you expect them to have read out?

**A** - What level of scaffolding will the pupil need be able to achieve the outcome on this occasion?

**R** - Can they visually access the handles to highlight the text? (If not, you may wish to move onto Lesson 4). Are they confident in using a tap and drag gesture? (If not, then please refer to Lesson 1, Unit 2 to practise this skill further).

**T** – How long will it take your pupil to confidently acquire this skill and understand how it can be utilised i.e. one or multiple lessons?

## Lesson 3: Comparing Methods of Activating Speak Screen

### Outcome

Compare applying the Speak Screen gesture in order to access pages of text in an electronic format on and offline, pausing and adapting speed on request to using the Speech Controller and identify their preference.

### Links to Previous Learning

Continue to develop competency in applying Speak Selection to identify unknown words and read out lines of text.

### Preparation

Prepare an electronic text in an appropriate app i.e. iBooks, Word, Pages etc.

### Key Vocabulary

Speak Screen

### Activity

Introduce the pupil to the Speak Screen function, modelling how to activate this using the gesture before providing guidance to activate Speak Screen. Develop the pupil's familiarity with Speak Screen icons, exploring how they can be used when accessing electronic texts. Challenge the pupil to pause and unpauses the text, discussing when this might be useful i.e. when the teacher is talking. Then introduce the Speech Controller, comparing this to activating Speak Screen using a gesture. Encourage the pupil to explore both methods before identifying their preference. Develop their ability to identify when Speak Screen would be of benefit to alleviate visual fatigue. Challenge the pupil to apply Speak Screen to accessing electronic information in Safari.

## Tailor It!

- Compare using the gesture and Siri to activate Speak Screen, discussing the pupil's preferred method and advantages and disadvantages of each method.
- Explore which voice the pupil prefers.
- Explore the 'Highlight Content' option in the Setting menu to highlight words, sentences or words and sentences in the pupil's preferential highlight style and colours.
- Adjust the speaking rate in the Settings menu to the pupil's preference.
- Adjust the idle opacity of the Speech Controller to suit the pupil's visual needs.
- Adjust the position of the Speech Controller to suit the pupil's visual needs.
- Explore the pupil's preferences in using Reader mode in Safari (this can also include size of text, colour of text and background text if the pupil is accessing a later version of iOS).

## Let's Apply

- Provide texts in iBooks for the pupil to access based on in-class topics to practise Speak Screen. Extend to home use if possible.
- Apply Speak Screen in order to find information online in relation to their topic.
- Encourage the pupil to identify and apply their own ideas about when Speak Screen could help them within the classroom or home environment.
- Support the pupil to transfer activating Speak Screen to other appropriate apps i.e. Notes, iBooks or Pages.

## Think SMART!

**S** – How do you expect the pupil to identify their preference? Will they be able to explain why?

**M** – Which functions do you expect them to be able to perform by the end of the lesson? If they are able to compare and contrast, how many similarities and differences can they give?

**A** - What level of scaffolding will the pupil need be able to achieve the outcome on this occasion?

**R** – Is the pupil capable of comparing the Speech Controller to the Speak Screen gesture yet? If not, the focus may be on performing the appropriate skills initially.

**T** – Will the pupil be able to confidently apply Speak Screen and the Speech Controller in one lesson before being able to compare them or will they need more time?

## **Instructions for Lesson 3: Speak Screen**

In Speak Screen, the iPad will automatically speak the entire contents of the screen rather than just a part of it.

### **Turn on Speak Screen**

- Tap on **Settings**
- Tap on **Accessibility**
- Go to Spoken Content
- Tap Speak Screen ON.

### **Use Speak Screen**

Go to your text document

Swipe down from the top of the screen with 2 fingers and it will play automatically.

### **Pausing Speak Screen**

Swipe down from the top of the screen for the Speak Screen menu

Use the controls to pause or adjust the rate.

### **Adjust speech speed on Speak Screen**

Swipe down from the top of the screen for the Speak Screen menu

Use the controls to pause or adjust the rate.

## Lesson 4: EasyReader and OCR

### Outcome

The pupil can access texts in EasyReader and/or an OCR app, utilising inbuilt options in order to suit their needs.

### Links to Previous Learning

For pupils who will be accessing this in a non-sighted way, they will need to initially move onto Unit 3b in order to develop their VoiceOver skills before returning to this Lesson.

### Preparation

A small amount of downloaded texts presented in EasyReader or in an OCR app. Consider activating a RNIB Bookshare account for the pupil if this is not already in place in order to access a wide range of electronic texts that can be uploaded directly into EasyReader (<https://www.rnibbookshare.org/cms/>). Please note that text can be cut and pasted into EasyReader.

### Key Vocabulary

EasyReader/OCR app

### Activity

Use backward chaining in order to develop the pupil's ability to locate, open and read texts in EasyReader or an OCR app, introducing key functions and exploring the pupil's preferences in speaking rate, highlighted text, text size, colour etc. Initially model playing and pausing on request within a motivating text before expecting the pupil to complete this action. Then gradually expect the pupil to complete all steps in order to locate and open EasyReader or the OCR app before selecting a text and reading it using their own preferences. Discuss the advantages and disadvantages of using this app as opposed to Speak Screen introduced in Lesson 3.

## Tailor It!

- Identify if the pupil needs to access this in a sighted or non-sighted way (i.e. By using VoiceOver).
- If the pupil is accessing EasyReader in a non-sighted way, will they be using their BrailleNote?
- Explore the pupil's audio settings preferences i.e. voice settings, pronunciation.
- Explore the pupil's text settings i.e. text size, font, margins, line spacing, letter spacing, text colour, background colour, sentence highlight colour and word highlight colour.
- Identify if the pupil would prefer to switch to text view (this removes images).
- If the pupil is not motivated by texts you can download from RNIB BookShare, consider using the 'My Clipboard Texts' option in the main menu to cut and paste text from another source.

## Let's Apply!

- Encourage the pupil to apply their developing skills to access texts at home and within the classroom environment.

## Think SMART!

**S** – Which functions do you expect the pupil to be confident with by the end of the lesson? Which options will they have covered? What type of texts have they explored?

**M** – How many functions do you expect the pupil to be confident with? How many options have they explored?

**A** - What level of scaffolding will the pupil need be able to achieve the outcome on this occasion?

**R** – Is the pupil able to identify their visual preferences yet or do they need opportunities to explore their visual preferences i.e. tied into their functional vision assessment and low vision aid assessment.

**T** – How does the pupil respond to new apps? Will they need more time to develop confidence before using the functions of this app.

## **Instructions for Lesson 4: Dolphin's EasyReader App**

Many pupils will want and need access to books, for reading for pleasure and for school. Books are now widely available electronically, from local library services, from the RNIB Bookshare, from Kindle and a plethora of other resources and the iPad supports a variety of different apps providing varying access to libraries, ways to read and ways to organise, including the inbuilt Books app, the Kindle app and Dolphin's EasyReader. Here, we shall look initially at EasyReader although instructions for the Books app can be found below.

### **EasyReader and RNIB Bookshare**

EasyReader is the preferred app for reading books downloaded from the RNIB Bookshare, and has seamless connections to the Bookshare catalogue. Information on setting up an education account and adding pupils can be found here:

<https://www.rnibbookshare.org/cms/get-started>

Pupils will need a Username and Password in order to access their Bookshare account on EasyReader.

### **Initial set-up**

Download the EasyReader app (freely available through the [Apple App Store](#)).

### **Create a Dolphin account**

You can link to an existing Google account, which will mean your account will be activated automatically and be ready to use straight away.

Alternatively, you can create a new Dolphin account using your email address:

- Open **EasyReader**.
- Select Sign up for a new Dolphin account.
- Enter your email address and select Next.
- Choose a secure password, at least 6 characters long.  
Note the email address and password you use to create your Dolphin account for future reference.

Agree to the Terms & Conditions and select Sign Up.

A pop-up will appear telling you that your account has been successfully created and that you have been sent an email to confirm your account. Select OK.

You will then need to go back and sign in to EasyReader:

- Open **EasyReader**.
- Select the Dolphin button to log into your Dolphin account.
- Login using the email address and password you used to set up your Dolphin EasyReader app account.

N.B. There is a Forgot Password option on the app sign in screen.

After successfully signing in to the EasyReader app, the My Books page will appear.

### **Sign in to Bookshare**

- Tap on **EasyReader** and log in.
- Tap on 'List of libraries'.
- Find and select RNIB Bookshare, and then log in to Bookshare using your user name and password.

You will stay signed in and should only have to do this the once.

### **Finding & opening books**

When you open EasyReader, you will go straight to the 'My Books' list. This contains a list of all the books available for you to read.

- Find the book in the 'My Books' list
- Tap on the book cover image for your chosen title. EasyReader will open the book in the Reader.
- If it's a book you haven't opened before, EasyReader will take you to the start otherwise it will return you to the last word, phrase or paragraph that was used or the start of the chapter last selected.

### **Listening to a book**

- In the Reader, use the 'Play' button (bottom centre) to start reading
- Use the Pause button to pause playback and Play to restart. Alternatively, you can Play/Pause using a 2-finger double tap.

While EasyReader is reading, you can lock the screen in the usual and continue to listen to with headphones.

## **Reading a book**

As 'Listening to a book' but don't press the 'Play' button.

## **Using My Books list**

The My Books list lists all the books that are available for you to read, and there are a number of ways to use it.

## **Find out more information about a book**

- Find the book in the 'My Books' list
- Tap the 'information' button to the right of the title to open the Book information screen. This contains a full description of the book, as well as options to open or delete it.
- Tap Close (top left) to return to the My Books list

## **Search for an author of title**

The Search box can be found at the top of the list of books, underneath the menu line.

N.B. This is a search within your books only. To search for new books, you would need to go to one of your libraries.


## **Sort your books**

Tap the Sort button (icon with a down arrow at the top right of your screen) and choose a sort option: 'Most recent', 'Title', or 'Author'.

## **Choose how to view your list**

Tap the tile button (next to the Sort button) to toggle between viewing 'My Books' as a list or a grid.

## **Changing the appearance of the text**

One of the strengths of EasyReader is the number of ways you can customise the appearance of your books. All of the following options can be found in the Text settings menu. This is reached by tapping the Text Settings icon  near the top right of the screen when you are in Reader.

When you have made your changes, tap Close to go back to the Reader screen.

**Change the text size:** use the 'Text size' slider to increase and decrease the size of the text. The text in the Reader will wrap when the size is increased  
N.B. you can also increase or decrease the size of the text in the Reader using the pinch to zoom gesture

**To change the text font used in the Reader:** in the Text settings menu, select the arrow to the right of Font to see other font options. Choose 'back' to return to the Text settings menu.


**To change the text spacing in the Reader:** in the Text settings menu, use the sliders to change the margin sizes, line, and letter spacing.

### **To change text, background and highlight colours**

- Option 1: change the colour theme. In the Text settings menu, tap the arrow next to Colour theme and select the appropriate option. Tap the back arrow to return to the main menu.
- Option 2: choose your own text, background and highlight colours. At the bottom of the Text settings menu, there are options to choose text colour, background colour, sentence highlight colour and word highlight colour. The present choices are depicted. Tap the arrow key to the right of the existing colour choice for each to view other options. Tap on your choice and press Back to return to the Text settings menu.

## **Speech settings**

### **Change the sound of the speech**

- In the Reader, tap the Audio settings icon  at the top right of the screen.
- Tap on Voice settings.
- Adjust the voice speed using the 'rate' slider. Use the play button at the bottom right of the screen to test the speed of the voice
- Once you are happy with the voice speed, choose 'back' or 'close' at the top left of the screen to return to the Reader

### **Change the pitch, volume and add pauses to the speech**


- In the Reader, tap the Audio settings button at the top right of the screen.
- Select the Voice settings button

- Use the sliders to adjust the voice pitch, volume and pause length. Use the play button (bottom right) to test your new voice settings
- Once you are happy with the audio settings, choose Back or Close to return to the Reader

### **To choose a different voice**

- In the Reader, tap the Audio settings icon
- Next to Voice, at the very top of the menu, you can see your existing voice name e.g. Daniel, English (United Kingdom). Tap the arrow key to the right of this to choose from a list of available voices, tapping on your selection.
- Tap 'back' or 'close' to return to the Reader.

### **Navigating your book**

You can navigate by heading, chapter, page number or bookmark, depending on how the book is structured. The default navigation is by heading. The book navigation icon  is in the bottom left corner of the screen near the play/pause button.

### **To navigate through the book**

- Select the Book Navigation button
- You can navigate your book by headings, page number or bookmarks; tap on the relevant tab.
- If you tap on a particular heading or page number, for example, EasyReader will take you there.

### **Navigate using a single tap**

If you are reading a book containing text, you can single tap anywhere in the book to move the highlight to that part of the book.

### **Navigate using the next and previous buttons**

- You can use the Next and Previous buttons (located either side of the Play button) to skip forward and backward in your book.

By default, EasyReader will skip by sentence in books containing text, or by 30 seconds in audio books but you can adjust this using the Navigation icon (looks

like a small timer at the bottom right of the screen) and choosing an alternative value.

- You can also swipe to the right with two fingers to skip forward. Swipe to the left with two fingers to skip backward

### **Navigate to a specific heading, page or bookmark**

Tap the Book navigation icon.

EasyReader will open a list of all the headings in a book. Using the tabs across the top of the screen, you can also switch to view:

- A list of all of the pages in the book
- A list of all of the bookmarks which you have added to the book

Choose a heading, page or bookmark. EasyReader will skip straight to that section in the book

### **Navigate using the progress slider**

You can also navigate your book using the progress slider. To do this:

- Tap on the progress bar. This may be at the top centre or at the bottom centre of your screen, with a percentage marked at the end, and on some iPads you will need to tap to see a slider (on others, the slider is always there).
- Move the slider left or right to navigate through your book.

### **Go to a bookmark**

EasyReader will automatically return you to the place you left off in a book, but you may wish to bookmark text to return to later.

### **To add a bookmark**

- In the Reader, tap on the part of the book which you would like to set as a bookmark.
- Tap the Bookmark icon, which will be at the top or bottom of your screen.
- The Bookmark menu will appear. This gives you the options of adding a text note about your bookmark (tap in the box to start typing it) or else an audio note, which can be done by tapping the microphone button.
- Tap the Save button to return to Reader. The section of the book where you added a bookmark will now include a bookmark symbol.

## **Finding your bookmarks**

- Tap the Book Navigation icon and choose Bookmarks.
- This will give you some of the text that you have bookmarked, indicate how far through the book the bookmark has been placed, and you can read any notes about your bookmark by tapping the pen icon.
- Tap on the relevant bookmark to be taken to that place in the text.

# Instructions for Lesson 1: OCR

OCR (Optical Character Recognition) software converts images of typed, handwritten or printed text into machine-coded text – text that software like Notes and Word recognise as writing rather than an image. This is particularly helpful if you are sight-impaired or struggle to read text that is small or has poor contrast or a fussy font as it can suddenly render things like worksheets, medicine labels, washing instructions on clothes or articles in a magazine accessible.

There are many OCR apps available for download to the iPad. Here we will look at just one, Microsoft Office Lens, which is free to download. Other options include KNFB Reader, Seeing AI (Microsoft) and OCR Scanner.

## How to use Lens

### 1. Choose what to capture

As soon as you open Microsoft Lens, you can choose a capture mode: Whiteboard, Document, Business Card or Photo.

**Whiteboard:** This mode is best used for capturing handwritten notes and sketches on a whiteboard or similar large surface like a flip-chart. Lens will adjust your images so that the background isn't too bright and the ink strokes are easier to see.

**Document:** best used for small words written or typed onto a small surface, like a page or note, forms, receipts, posters and menus.

**Business Card:** this mode captures information from a business card, and will save to your Contacts app.

**Photo:** best for capturing photos and images.

This menu may be on the right side of the screen underneath the shutter bottom, or else can be reached by swiping left or right near the bottom of the screen.

## Step 2: Take the picture

After you've selected your capture mode, you can either take a new photo with your camera, or else import an existing image.

To take a picture with your iPad, point the camera at the item you want to capture and make sure that the orange frame in the camera outlines the item you want to capture. You can change your camera's flash setting by tapping the Flash icon in the upper right corner of the capture window.

When you're ready to take the picture, tap the round Shutter button at the bottom centre of your screen.

N.B. People who are blind or have low vision can use the VoiceOver feature in iOS to get real-time voice guidance in Microsoft Lens — such as “move right,” “move up,” and more. For more information, see [Accessibility in Microsoft Lens for iOS](#).

If you prefer, you can import an existing image from any Photo Album on your device.

- In the Microsoft Lens capture screen, tap the Pictures icon (which may be at the right, or in the lower left corner of the screen).
- Navigate to the photo album containing the picture you want to use, and then tap it to import it into Microsoft Lens.

## Step 3: Review and edit

Microsoft Lens lets you edit captured images before you save them, so they look exactly how you want. You have the option to adjust the borders of an image after you capture it, or to capture multiple images one after the other and edit them later.

Tap any of the icons that appear in the lower tray to begin editing or adjusting a captured image.

You can Add a new image to your scan, apply a Filter to the image, Crop, Rotate, or Delete the image, or annotate it with the Pen or with Text.

Filters are used to quickly apply visual enhancements to selected image (for example, to remove all colours from a document).

By using the optional Crop feature, you can trim away any unwanted parts of the image by excluding them from your selection. When you have finished cropping the image, tap Confirm in the lower right corner. If you want, you can then continue editing the current image with any of the other editing tools.

When you're done editing your images, tap Done in the lower right corner.

You might now choose to Save and Share your image. Alternatively, you might wish to listen to the text in your document immediately.

### **Option 1: Save and share**

If your image was captured in Whiteboard, Document, or Photo mode, you can save it to your Photo Library, as a **PDF**, or alternatively save it to OneNote or OneDrive. PDF files extract the text information from a captured image. You can search the text contents of a PDF file and highlight or copy any part of the page with your preferred PDF Reader app.

You can also save the image as either a **Word** or a **PowerPoint** document in your OneDrive account.

**Microsoft Word:** contains powerful OCR software, capable of deciphering all legible text in your document, whether typed, handwritten or printed. It will also capture the general layout of the document you have scanned. *If you intend to apply OCR to your image, therefore, you should select to save as a Word file.*

**Microsoft PowerPoint:** can recognise handwritten lines and strokes that are transformed into drawing objects that can be re-coloured, resized, moved around, and edited. You can also remove the background of drawings, which makes it easier to reuse them in other presentations.

If your image was captured in Business Card mode, tap OneNote to save it as a vCard (.vcf file).

Captured images saved as Word, PowerPoint, or PDF files will be in your Documents folder on OneDrive, so you can access them from any of your devices. PDF files can also be saved locally on your iPad, and you can edit the save location for your PDF by tapping the Save button.

## **Option 2: listen to any text within your image immediately**

If you are more interested in understanding the written content of your document immediately, do not choose an option within the 'Save To' menu. Instead look at the 'Share To' menu at the bottom and tap on **Immersive Reader**.

Warning: it might take a little while to open!

## **Using the narrator**

**Listen to the text:** When the document opens, tap on the green Play button at the bottom of the screen. Each word is highlighted as it is read.

**Pause play:** The Play button toggles to become Pause when the narrator is reading. You can either press the Pause to stop and play to start up again. Alternatively, double-tap the screen.

**Skip forward or back:** tap on the screen where you want narration to start, then tap Play.

## **Voice options**

To change the speaking speed of Immersive Reader, tap on Voice Settings next to the Play button.

You can swipe the slider left or right to decrease or increase voice speed.

Tap on Male or Female to change the gender of the speaker.

swipe right or left until you hear "Speak button," double-tap the screen, and swipe up or down to adjust the speed in the **Speaking Rate** slider. The slider lets you control the speed to your personal preference. To dismiss the slider popup, tap the screen. When you hear "Dismiss popup", double-tap the screen.

## **Change how text looks in Immersive Reader**

Tap on Text Settings (two A's) at the top of the screen.

**Change text size:** move the slider until you can see the text of your document reach the desired size. The font size is indicated under the centre of the dial.

**Increase spacing:** toggle the button ON to increase spacing. This is the spacing both between letters and lines.

**Change Font:** tap next to your preferred font option.

**Change colour themes:** the little coloured buttons show a small selection of the colour themes you can apply to Immersive Reader. Tapping on the More colours label will bring up many more. Tap on your preferred option.

**Show windows of text at a time:** along from the Text settings icon is an icon that looks like an open book. Tap on this to find an option called Line Focus. The default option is for the whole body of text to be available at once, but by toggling the button on you can select to turn Line Focus on. You can choose, by tapping on one of the 3 boxes below, whether to see just 1 line of text when reading, 3 lines of text, or 5 lines of text.

For all options, click on the X at the top right of the menu to close and return to the text.

## Emerging literacy options

There are some lovely features within Immersive Reader to support the teaching of literacy.

**Picture Dictionary:** this is an option within the Reading menu at the top (icon shows an open book). Toggle Picture Dictionary (Boardmaker) ON to have an image pop up for each word you tap in the main screen. Children will also have the option to re-listen to the word being said by tapping on the small 'Listen' box to the top left.

**Highlighting syllables in words:** this option is available in the middle menu at the top, a picture of a line of text with a magic wand. Toggle ON Syl-la-bles to break down longer words in the text into their constituent syllables to aid young reader.

**Highlighting parts of speech:** in this same ‘Magic wand’ menu, you can choose to have different parts of speech within the text – nouns, verbs, adjectives and adverbs - highlighted in different colours by tapping the toggle ON next to each option. Colour choices for each have been made but a drop-down menu next to each gives the option to change to something more suitable.

## **Accessibility**

To make it easier to work with Microsoft Lens, you can connect a keyboard to your device with either Bluetooth or USB.

Microsoft Lens is entirely compatible with the VoiceOver. Details can be found here:

[Microsoft Lens for iOS - Office Support](#)

In addition, the Accessibility settings in iOS and iPadOS can help you use Microsoft Lens in a way that works best for you. On your iPhone or iPad, go to Settings > Accessibility to turn on features like VoiceOver.

## 4b. VoiceOver

### Outcome

The pupil will be able use correct Voiceover gestures and features to interact with a range of information on and off-line.

### Medium-Term Planning

Lesson	Outcome	Key Skills	Key Knowledge	Links to Other Units
<b>Lesson 5: Introduction to VoiceOver</b>	The pupil can use the correct Voiceover gesture to identify apps, scroll between apps from left to right and right to left, open apps and scroll between screens to locate more apps as well as turn Voiceover on and off using the shortcut feature.	Apply basic VoiceOver gestures	Correct vocabulary for VoiceOver gestures The purpose of screen-readers How an in-built screen-reader can support access to an iPad Which gestures suit the pupil best	Unit 2, Lesson 1
<b>Lesson 6: Using VoiceOver to Access Texts</b>	The pupil will be able to apply VoiceOver gestures to listen to text presented in apps by successfully opening, pausing, unpausing, reading an electronic text from the top of the	Applying learnt gestures to accessing texts	How VoiceOver can enable access to reading	

	screen and navigating through the text on request.			
<b>Lesson 7: Using VoiceOver in Safari</b>	The pupil can apply VoiceOver to navigate webpages in Safari, comparing their experience with and without Reader mode in order to find key information.	Activating Safari Reader Applying VoiceOver gestures to navigating Safari	How Safari Reader can support navigation in Safari The importance of accessing decluttered text	
<b>Lesson 8: Introduction to the VoiceOver Rotor Feature</b>	The pupil can identify their preferred gesture to activate and navigate the VoiceOver Rotor feature.	Activate the VoiceOver Rotor Use Rotor gestures	Which VoiceOver Rotor gesture suits their needs The function of the Rotor	
<b>Lesson 9: Applying the VoiceOver Rotor to Safari</b>	Compare and contrast navigating webpages using VoiceOver with and without the Rotor.	Applying the Rotor to navigating Safari Utilising the Rotor and Reader in conjunction with each other	Similarities and differences between using and not using Rotor in Safari Which method suits their needs	

# iPad Accessibility Skills

## Unit 4 - Accessing Text

### VoiceOver 1

### Progression

#### Basic Skills

#### Introduce

#### Developing

#### Achieved

Use the shortcut function to start and stop VoiceOver

Use a swiping gesture to move onscreen

Use a single finger double-tap gesture to open apps

Use a split-tap gesture to open applications

Read the current item

Use a three-finger gesture to move between screens

Pause and unpauses VoiceOver

Read from the top of the screen

#### Intermediate skills

Use Item Chooser

Use the screen curtain

Mute and unmute VoiceOver

Unlock iPad

Ask for help

Locate VoiceOver menu in the Accessibility Menu in Settings

<b>Advanced skills</b>			
Go to Dock and App Switcher			
Go to Control Centre and Notification Centre			
Hear Status Bar information			
<b>VoiceOver 2 (with Rotor and external keyboard)</b>	<b>Progression</b>		
<b>Advanced skills</b>	<b>Introduce</b>	<b>Developing</b>	<b>Achieved</b>
<b>Using the VoiceOver Rotor</b>			
Activate the Rotor			
Navigate the Rotor to locate an option			
<b>Understanding Rotor options</b>			
Review text as you type with Characters, Words, and Lines			
Move through the organisation of a page or screen			
Move from link to link			
Move through a page			
<b>Customise VoiceOver rotor</b>			
Choose rotor options			
Have VoiceOver confirm rotor actions			
Add popular commands e.g. Language/Speed/Zoom/Punctuation			
<b>Use VoiceOver with external Apple keyboard</b>			
Choose VoiceOver modifier key			
Common VoiceOver keyboard commands			
Quick Nav using the arrow keys			

## Lesson 5: Introduction to VoiceOver

### Outcome

The pupil can use the correct Voiceover gesture to identify apps, scroll between apps from left to right and right to left, open apps and scroll between screens to locate more apps as well as turn Voiceover on and off using the shortcut feature.

### Links to Previous Learning

Ensure the pupil has successfully completed Lesson 1, Unit 2 and is therefore competent in naming and applying gestures.

### Preparation

Add VoiceOver to the Accessibility Shortcut menu within Settings.

### Key Vocabulary

VoiceOver, single-finger single tap, single-finger double tap, triple-finger swipe, Home button, single-finger swipe

### Activity

Demonstrate triple-clicking the Home button in order to activate VoiceOver using the shortcut feature. Model using a single-finger swipe VoiceOver gesture to identify apps in a single line on the Home Screen. Provide opportunities for the pupil to locate a specified app using Voiceover, gradually increasing the range of apps to search through on the Home screen from left to right. They may enjoy playing Hide and Seek using a familiar app icon. Once the pupil is successfully able to scroll from left to right, practise scrolling from right to left. Develop the searching technique by asking the pupil to use a three-fingered swiping gesture to scroll to another screen to search for an app. Once the pupil has located a named app, provide guidance for the pupil to open it. Ensure that the pupil associates the correct gesture name with the appropriate gesture.

## Tailor It!

- Compare activating and deactivating VoiceOver using the shortcut feature to Siri and identify pupil's preference.
- Identify the pupil's preferred gesture to open an app using VoiceOver by comparing a double-tap gesture to a split-tap gesture. Which one do they prefer? Extend to opening an app using Siri instead of the single-finger double-tap gesture.
- Change the speaking rate to suit the pupil.
- Change the voice to suit the pupil's preference.
- Adapt the Verbosity within the Settings menu to customise how much information is read out.
- Depending on the level of functional vision, explore if the pupil prefers the use of the large cursor within the Settings menu.

## Let's Apply!

- Use motivating apps to encourage the pupil to practise basic VoiceOver gestures.
- Consider using the apps 'Ballyland Stay Still, Squeaky!' and 'Ballyland™ CosmoBally™ in Space' or VO Lab depending on the developmental age of the pupil as a fun way to practise VoiceOver skills.
- Demonstrate how to turn VoiceOver on and off in the Settings menu.

## Think SMART!

**S** – Which gestures do you expect the pupil to be able to demonstrate by the end of the lesson?

**M** – How accurate do you expect them to be with their gestures? How many attempts to locate and/or open an app before they are successful?

**A** - What level of scaffolding will the pupil need to be able to achieve the outcome on this occasion?

**R** – Check that the pupil is ready to begin VoiceOver (in relation to their fine motor skills and cognitively).

**T** – Will the pupil be able to perform all of these gestures in one lesson or do these skills need to be broken down into a number of lessons?

## Instructions for Lesson 5

Voiceover is a gesture-based screen reader that enables non-visual access to the iPad. You can hear everything that is happening on the screen and, by using simple gestures, you can interact with items, use apps and explore locations and context.

### How to turn VoiceOver ON/OFF

There are several ways to do this:

- Use Siri. Ask her to “Turn on VoiceOver” and then to “Turn off VoiceOver” when you are finished.
- Triple-click the Home button and select VoiceOver (on iPads with a Home button, if accessibility shortcut is configured for VoiceOver). Do this again to close.
- Triple-click the top button (on other iPad models). Do this again to close.
- via the Control Centre: swipe down from top right of the screen. Select Accessibility Options icon (looks like a little man) and then select VoiceOver. Do this again to close.
- via Settings: tap Settings, tap Accessibility, and then tap next to ‘VoiceOver’ to toggle it ON. Do this again to turn it OFF.

### Learning and practicing VoiceOver gestures

VoiceOver uses the basic gestures that are used elsewhere on the iPad.

However, it changes what they do so that you can hear the descriptions without activating the buttons.

The key VoiceOver gestures are:

- The 1-, 2-, 3- and 4-finger tap
- The 1-, 2-, 3- and 4-finger double-tap
- The 1-, 2-, 3- and 4-finger triple-tap
- Swiping up, down, left and right with 1, 2 and 3 fingers

It is essential that pupils are able to render these gestures accurately if they are to use VoiceOver successfully. iPad helpfully provides a practice arena called the VoiceOver ‘Help Mode’. In Help Mode, you practice a gesture safe in the

knowledge it won't actually do anything! VoiceOver will simply announce the gesture and state what it does.

## How to access Help Mode

- Tap on **Settings**
- Tap on **Accessibility**
- Tap on 'VoiceOver'
- Turn VoiceOver ON, and then tap 'VoiceOver Practice'.
- You will need to then double-tap the screen to enter VoiceOver Practice (as VoiceOver is now active, a simple tap will announce what item you have pressed rather than activate it).

To come out again, tap on Done and then double-tap to come out.

## Customising VoiceOver voice settings

Before going any further, you might like to customise VoiceOver so that it is set up in the way that best suits you. You can customise these settings from the VoiceOver menu (reached by tapping on **Settings** and then **Accessibility**). VoiceOver should be turned OFF.

### Speaking rate

At the VoiceOver Menu, 'Speaking rate' is the first menu option.

Move the slide left and right to change how quickly the voice speaks (moving it to the right makes it faster).

### Speech

The voice used by default is Samantha, a female American voice, but users can choose between male and female voices as well as different accents from within the UK and English-speaking world.

- At the VoiceOver menu, tap on 'Speech' and then 'Voice'.
- The voices are named and categorised according to accent. Tap next to each voice to download a sample.
- When the sample has downloaded, tap on the arrow to see a play button. When you have listened to it, tap on the back arrow above to return to the original menu.
- You can try other voices in the same way. Otherwise, select one that you have downloaded by tapping to the left of the name to tick it.

## Pitch

You can make the voice pitch higher or lower in the Voiceover > Speech menu. Use the slider to increase or decrease pitch.

Underneath is a toggle key for 'Use Pitch Change'. Toggling this ON would mean that the pitch will get lower towards the end of a sentence or a list, just like it does when speaking. Tap to select or deselect.

## Verbosity

Verbosity determines what information is read, such as punctuation, capital letters, embedded links, table headers, emojis, and similar.

- In the VoiceOver menu, tap on Verbosity
- You can see a list of all the things that VoiceOver can tell you about. For some options, there is simply an ON/OFF toggle button which you tap, for example, Table Headers and Speak Emojis.
- For others, there is a sub-menu with additional options which can be reached by tapping the arrow to the right of the menu item. For example, the Capital Letters menu offers different ways for VoiceOver to alert you to capitals: Speak Cap, Play Sound; Change Pitch; or Do Nothing. Tap on your choice. Alternatively tap the back arrow to return to the previous Verbosity menu.

## Starting with VoiceOver gestures

### Explore the screen

**Highlight and hear what is under your finger:** single-tap the screen with 1 finger.

**Scroll to next pages:** swipe left with 3 fingers to scroll right, and right with 3 fingers to scroll next.

**Scroll to pages above or below:** swipe up with 3 fingers to scroll down, and down with 3 fingers to scroll up.

### Interact with items

**Select an item:** after single-tapping the screen with 1 finger to hear the item, double-click the screen to open.

**To Select the next item:** (only useful if you know the layout of you iPad screen), flick right or left with one finger.

## Lesson 6: Using VoiceOver to Access Text

### Outcome

The pupil will be able to apply VoiceOver gestures to listen to text presented in apps by successfully opening, pausing, unpausing, reading an electronic text from the top of the screen and navigating through the text on request.

### Links to Previous Learning

Ensure that the pupil is able to successfully apply a single-finger single tap, a single-finger double tap, a single-finger swipe to the left and right as well as a triple-finger swipe gesture to the left and right using VoiceOver (Lesson 1, Unit 3b).

### Preparation

Prepare an electronic text in iBooks.

### Key Vocabulary

VoiceOver, single-finger swipe, single-finger single tap/split-tap, double-finger single tap, double-finger swipe up, double-finger swipe down, triple-finger swipe

### Activity

Explain how information in print accessed by their peers in class can also be read using VoiceOver. Use examples such as texts to demonstrate this. Discuss the purpose of accessing texts in iBooks in order to listen to texts for home and school use. Model and provide guidance in order to select lines of text to be read with Voiceover, pause and un-pause using a two-finger single tap and scroll to the next screen using gradually more complex texts and formats.

Employ role-play scenarios to model and practise pausing and unpausing VoiceOver in iBooks. Explain what happens if you touch the screen or buttons after pausing VoiceOver. What can you do to start VoiceOver again? Demonstrate using a two-finger swipe gesture to command VoiceOver to read

from the top of the screen. Encourage the pupil to read texts from the top of the screen and use this as a problem-solving strategy when pausing/unpausing has been misapplied.

Develop the pupil's ability to use a precise gesture to command VoiceOver to read from the top of the screen to locate key information. Talk over VoiceOver so that the pupil can't hear. What gesture can you use to listen to the page again? Ask the pupil to model how to do this and support them to improve their technique if appropriate. Model also accidentally tapping the screen so that it only reads out one line of text. Encourage the pupil to identify the two-finger drag up gesture to command VoiceOver to read from the top of the screen again. Identify at least one situation in which this gesture is useful in the classroom.

Once the pupil is developing competency in this gesture, provide chaining to encourage them to locate iBooks, open the library, navigate the library to find a named book and open this with VoiceOver.

### **Tailor It!**

- Ensure the Voiceover reading pace suits the pupil.
- Ensure that the Voice suits the pupil.
- If the pupil uses a BrailleNote, they could use access this alongside in order to have the print available in an auditory and Braille format.

### **Let's Apply!**

- Discuss the purpose of accessing texts in iBooks in order to listen to texts for home and school use.
- Transfer access to texts using the taught gestures skill in other apps i.e. Pages.
- Encourage the use of VoiceOver within the classroom to enable the pupil to access texts quickly and easily.

### **Think SMART!**

**S** – Which gestures do you expect the pupil to learn and apply by the end of the lesson? Will the pupil be able to demonstrate these in iBooks and other apps too?

**M** - How accurate do you expect them to be with their gestures? How many attempts before they are successful?

**A** - What level of scaffolding will the pupil need be able to achieve the outcome on this occasion?

**R** – Is the pupil confusing gestures? Perhaps they need more time to complete Lesson 2, Unit 3?

**T** - Will the pupil be able to perform all of these gestures in one lesson or do these skills need to be broken down into a number of lessons in order to confidently apply within iBooks?

# Instructions for Lesson 6: More VoiceOver Gestures

## Listening to content

**Read aloud from the current position:** swipe down with 2 fingers.

**Read aloud from the top:** swipe up with 2 fingers.

**Read whole screen:** swipe down from the top.

**Pause/resume reading:** single-tap the screen with 2 fingers.

## Using the Screen curtain

The screen curtain blacks out the screen so that the user has privacy. To the sighted user, the screen appears to be off although there is still full functionality.

To activate or de-activate the screen curtain, triple tap on the screen with three fingers.

## Unlock iPad

- On an iPad with a Home button, press the Home button (Touch ID must be enabled).
- Otherwise, press the Sleep/Wake button at the top. If Face ID is enabled, drag up from the bottom of the screen until you hear 2 tones.

You may be prompted to enter your passcode.

## Asking for help

VoiceOver help is there to assist if you get stuck.

- To activate: double-tap the screen with 4 fingers.
- To deactivate: use 2 fingers to scrub back and forth on the screen.

## Toggle VoiceOver ON and OFF

Double-tap the screen with three fingers.

## More on Gestures

**Go to Home screen:** swipe 1 finger from bottom of the screen. Lift finger on the 2<sup>nd</sup> sound. Alternatively, press the Home button.

**Go to Dock:** Swipe 1 finger from the bottom of the screen until you hear the 2<sup>nd</sup> screen. Then swipe down. Double-tap to select your option.

**Go to App Switcher:** Swipe 1 finger up from the bottom of the screen. Lift finger on the 3<sup>rd</sup> sound. Alternatively, double-click the Home button. To browse the open apps, swipe left or right to find the app you want, and then double-tap to select.

**Go to Control Centre:**

- swipe 1 finger down from the top of the screen. Lift finger on the 2<sup>nd</sup> sound.
- tap any item in the status bar, then swipe up with three fingers.
- to dismiss, do a 2-finger scrub (3 times, quickly move 2 fingers back and forth in a 'z' shape).

**Go to Notification Centre:**

- swipe 1 finger down from the top of the screen. Lift finger when you hear the 3<sup>rd</sup> sound.
- tap any item in the status bar, then swipe down with three fingers.
- to dismiss the notifications screen, do a 2-finger scrub (as above).

**Hear Status Bar information:**

- tap the status bar at the top of the screen.
- swipe left or right to hear the time, battery life, Wi-Fi strength, status of downloads etc.

**Search from Home Screen:**

- tap anywhere on the Home Screen outside the status bar.
- swipe down with three fingers.

# Lesson 7: Using VoiceOver in Safari

## Outcome

The pupil can apply VoiceOver to navigate webpages in Safari, comparing their experience with and without Reader mode in order to find key information.

## Links with Previous Learning

Ensure that the pupil is confident in applying basic VoiceOver gestures introduced in Lesson 1 and 2, Unit 3.

## Preparation

Identify motivating webpages or pages linked to topics which have Safari Reader mode available.

## E-Safety

Ensure that the pupil is able to follow e-safety school guidance in order to recognise any inappropriate content and knows how to report concerns.

## Vocabulary

Reader mode

## Activity

Introduce the Reader mode in Safari, using VoiceOver and functional vision if appropriate in order to locate the icon and select this mode. Successfully navigate through a webpage using Reader mode with VoiceOver in order to answer simple questions or retrieve facts. Make comparisons between webpages with and without Reader mode enabled and identify benefits of using Safari Reader if it is available. Begin with familiar webpages before exploring unfamiliar pages, asking the pupil to find key information from these webpages.

## **Tailor It!**

- Utilise options within Reader mode in order to suit the pupil's visual needs.

## **Let's Apply!**

- Provide opportunities to access a number of websites using VoiceOver, applying their ability to locate Reader mode and activate this as well as problem-solve if they cannot find it i.e. Reader mode is not available.
- Encourage the use of VoiceOver and Reader mode within the classroom environment and at home to quickly access information online.

## **Think SMART!**

**S** – What research skills do you expect the pupil to perform? What kind of websites do you expect the pupil to access? Are these both familiar and unfamiliar websites?

**M** – How many questions do you think they can answer? How many attempts will it take to find the information/Reader mode button?

**A** - What level of scaffolding will the pupil need be able to achieve the outcome on this occasion?

**R** – Ensure the pupil is confident in applying taught VoiceOver gestures to date? Have they had any experience of accessing the internet before or do they need some pre-teaching before introducing this lesson?

**T** – Will the pupil be able to successfully locate and activate Reader mode before locating information in websites and comparing this to without Reader mode in one lesson or does this lesson need to be broken down further?

# Lesson 8: Introduction to the VoiceOver Rotor Feature

## Outcome

The pupil can identify their preferred gesture to activate and navigate the VoiceOver Rotor feature.

## Preparation

Ensure VoiceOver is either available as a shortcut feature or on.

## Key Vocabulary

VoiceOver Rotor

## Activity

Model activating the VoiceOver Rotor and listening to the options using all of the available gestures. Encourage the pupil to practise activating the VoiceOver Rotor using all of the gestures and identify their preferred method. Then provide guidance in order for the pupil to access the VoiceOver Rotor menu and choose an option. Discuss when the VoiceOver Rotor can be used to change how they can utilise VoiceOver to access information onscreen.

## Tailor It!

- Ensure the pupil chooses their preferred method to activate the VoiceOver Rotor and practises this method.
- Control the amount of options and their function within the Rotor within the Settings menu i.e. starting with two.

## Let's Apply!

- If suitable for the pupil's developmental level, provide opportunities to develop VoiceOver Rotor skills using the Ballyland Rotor app.

- Gradually increase the amount of options within the Rotor from the Settings menu.

### **Think SMART!**

**S** – Will you expect the pupil to activate and navigate the VoiceOver Rotor within the lesson?

**M** – Within how many attempts do you think it will take for the pupil to activate the Rotor on each occasion? On how many occasions will it take the pupil to successfully activate the Rotor?

**A** - What level of scaffolding will the pupil need be able to achieve the outcome on this occasion?

**R** – Are there some gestures which you know will be easier for the pupil to perform than others so you can just focus on those? Are they confident in performing a flick up and down yet or do they need more practise before applying it to the Rotor?

**T** – Will the pupil be able to successfully activate and navigate the Rotor within one lesson as well as understand its purpose or do they need to achieve this over a number of lessons?

## Instructions for Lesson 8: Using the VoiceOver Rotor

The Voiceover rotor is a virtual control that acts like a dial when VoiceOver is on. It allows you to move through a document, navigate web pages, edit documents and much more. It also enables you to change how VoiceOver works, adjusting settings and accessing additional commands and features including special input methods such as Braille or Handwriting.

Although it is a very sophisticated device, it always works in the same way:

- With VoiceOver ON, rotate two fingers on your screen as if you're turning a dial. If you prefer to use one finger on each hand, simultaneously drag up with one finger and drag down with the other.
- VoiceOver speaks the rotor setting. Keep rotating your fingers to hear more settings. Stop rotating your fingers when you hear the setting you want.
- Quick swipe up or down to change the setting depending on the option chosen e.g. for volume, it will make it louder or quieter; for speed, it will make it faster or slower.

The available rotor settings and their effects depend on what you're doing. For example, if you choose Headings when you're browsing a webpage, swipe down or up to move the VoiceOver cursor to the next or previous heading.

### Understanding rotor options

With all of these options, you can move from one item to the next by flicking on the screen from top to bottom with one finger. You can move VoiceOver to the previous item by flicking from bottom to top.

### Review text as you type with Characters, Words, and Lines

**Characters:** Reads one character at a time.

**Words:** Reads one word at a time.

**Lines:** Reads one line at a time.

## Move through the organisation of a page or screen

**Containers:** Moves from one onscreen container to the next. The Dock and Home screen, for example, are containers.

**Headings:** Moves from one heading to the next. Try using this rotor in Settings > Mail, Contacts, Calendars.

**Landmarks:** Moves between banners, navigation, and buttons in HTML content (such as a webpage or HTML email).

**Same Item:** Moves from one item to the next item of the same kind. Try this with the links in the results of a Safari web search.

**Vertical Navigation:** Moves up or down with one-finger vertical flicks. Try this on the Home screen.

**Static Text:** Moves from one line of static HTML text to the next. Static text is the main text on the page—not links or button names, for example.

## Move from link to link

**Links:** Moves from one link to the next.

**Visited Links:** Moves from one link to the next, but only those that you've already clicked.

**Non-visited Links:** Moves from one link to the next, but only those that you haven't clicked yet.

**In-Page Links:** Moves from one in-page link to the next on a webpage.

## More ways to move through a page

**Tables:** Moves the VoiceOver cursor to the start of a table on a webpage.

**Lists:** Moves the VoiceOver cursor to the start of a list on a webpage.

**Buttons:** Moves from one button to the next in HTML content.

**Form Controls:** Moves between buttons and menus when using a form.

**Text Fields:** Moves from one text field to the next in HTML content.

**Search Fields:** Moves from one search field to the next in HTML content.

**Images:** Moves to images.

## Customise the VoiceOver rotor

Some of the options above are on the rotor by default, and some are optional.

To choose your rotor options:

- Select Settings
- Select Accessibility

- Go to VoiceOver and then Rotor

Now select the options you want.

Alternatively drag  icon to reorder settings.

To have VoiceOver confirm rotor actions:

- Select Verbosity
- Turn ON Speak Confirmation.

Here are some of the more popular commands to add to the rotor:

### **Language**

To change the voice VoiceOver uses. There are many options, including male and female and a variety of different accents and dialects.

### **Speed**

This option allows you to adjust the text-to-speech voice speed quickly.

### **Zoom**

You can use VoiceOver and Zoom simultaneously. Controlling Zoom on the rotor allows quicker enlargement and shrinking of the screen.

### **Punctuation**

Sometimes you want to hear every piece of punctuation, whereas others you will just want the text. This control enables you to quickly adjust the amount of punctuation VoiceOver speaks.

## **Using VoiceOver with an external Apple keyboard**

Using an external keyboard is a rather different experience to using the integrated keyboard as it enables you to use keyboard shortcuts to activate VoiceOver commands.

You can also use VoiceOver help to learn the keyboard layout and the actions associated with various key combinations. This means that although VoiceOver tells you what keys you are pressing and what keyboard commands they are associated with, it doesn't perform the associated action – in the same way that the VoiceOver Practice screen enables you to try out VoiceOver gestures without them taking effect.

## Choosing the VoiceOver modifier key

The VoiceOver modifier key is a key or set of keys you press to change the way the keyboard works and thus enable you to control VoiceOver. As with other screen readers, you can set the modifier to be the Caps Lock key. You can also choose to use the Control and Option keys (pressed simultaneously).

- Select Settings
- Select Accessibility
- Select VoiceOver, for the VoiceOver men
- Select Typing
- Finally, select Modifier Keys
- Choose which modifier you would like to use (the Caps Lock key or the Control + Option keys) and double tap to select.

## Common VoiceOver keyboard commands

The modifier is abbreviated as “VO” in the tables below; for VO you should insert the modified key/s you selected.

Action	Shortcut
Turn on VoiceOver Help	VO-k
Turn off VoiceOver Help	Esc (escape)
Select the next or previous item	VO-Right Arrow or VO-Left Arrow
Activate the selected item	VO-Space bar
Touch and hold the selected item	VO-Shift-M
Read from the current position	VO-A
Read from the top	VO-B
Pause or resume reading	Control
Copy the last spoken text to the clipboard	VO-Shift-C
Search for text	VO-F
Mute or unmute VoiceOver	VO-S
Go to the Home Screen	VO-H
Move to the status bar	VO-M
Open the notifications screen	Move to the status bar (O-M) then Option-Up Arrow
Open Control Centre	Move to the status bar (VO-M) then Option-Down Arrow
Open Search	Option-Up arrow

Open the App Switcher	VO-H-H
Switch apps	Command-Tab or Command-Shift-Tab
Open the Item Chooser	VO-I
Change the label of the selected item	VO-/
Start, stop or pause an action	VO-Hyphen
Swipe up or down	VO-Up Arrow or VO-Down Arrow
Adjust the rotor	VO-Command-Left Arrow or VO-Command-Right Arrow
Adjust the setting specified by the rotor	VO-Command-Up Arrow or VO-Command-Down Arrow
Turn the screen curtain ON or OFF	VO-Shift-F11
Return to the previous screen	Esc (escape)

### Quick Nav using the arrow keys

Turn on Quick Nav to control VoiceOver using the arrow keys.

Action	Shortcut
Turn Quick Nav on or off	Left Arrow-Right Arrow
Select the next or previous item	Right Arrow or Left Arrow
Select the next or previous item specified by the rotor	Up Arrow or Down Arrow
Select the first or last item	Control-Up Arrow or Control-Down Arrow
Tap an item	Up Arrow-Down Arrow
Scroll up, down, left, or right	Option-Up Arrow, Option-Down Arrow, Option-Left Arrow, or Option-Right Arrow
Adjust the rotor	Up Arrow-Left Arrow or Up Arrow-Right Arrow

# Lesson 9: Applying the VoiceOver Rotor to Safari

## Outcome

Compare and contrast navigating webpages using VoiceOver with and without the Rotor.

## Links to Previous Learning

Ensure the pupil is confidently able to activate the VoiceOver Rotor and scroll through the options.

## Preparation

Identify suitable webpages for the pupil to access. If the pupil preferred using the Reader mode, ensure identified webpages have this mode available.

## E-Safety

Ensure that the pupil is able to follow e-safety school guidance in order to recognise any inappropriate content and knows how to report concerns.

## Key Vocabulary

VoiceOver Rotor

## Activity

Model applying the Web Rotor to navigate headings on familiar webpages. Ask the pupil to apply the Web Rotor to initially locate named headers before locating key/named information. Compare this experience to navigating web pages using VoiceOver without the Web Rotor and identify when benefits of navigating the webpage by locating headers using the Web Rotor. Then challenge the pupil to locate key information from unfamiliar webpages, applying Reader and the Web Rotor when appropriate. Finally, apply the VoiceOver Rotor in order to navigate

results from a familiar search engine using and locate a named Header before opening the webpage.

### **Tailor It!**

- Apply the pupil's preference in utilising Safari Reader mode from Lesson 3.

### **Let's Apply!**

- Extend the pupil to applying the VoiceOver Rotor in Safari to locate links, tables, lists, buttons, form controls, text fields, search fields and images before navigating these.
- Extend the pupil to applying the VoiceOver Rotor to navigate text and pages i.e. in order to check a spelling (Characters) or a line of text (Line).

### **Think SMART!**

**S** – Which ways do you expect the pupil to navigate the webpages i.e. links and/or headings when using the Rotor? Do you expect the pupil to identify general similarities and differences or related specifically to ease of access?

**M** – How many ways do you expect the pupil to demonstrate? How accurate do you expect the pupil to be?

**A** - What level of scaffolding will the pupil need be able to achieve the outcome on this occasion?


**R** – Is the pupil able to compare and contrast within this context or will the focus be on identifying preference and/or explaining their reasoning why?

**T** – Will the pupil be able to have enough experience of navigating webpages with and without the Rotor within one lesson or do they need more time to complete this task?

## How to use VoiceOver – An Apple Screen Reader

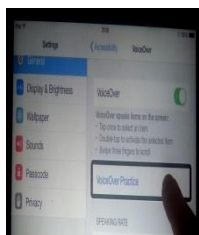
This quick start guide is designed to help you get started using the Apple accessibility feature called VoiceOver which is a screen reader. It is highly recommended that you use the VoiceOver Practice option to rehearse the Voiceover gestures (finger movements) as the gestures are different than those you usually use on an iPad. You will find the instructions on how to do this below.



**Step 1:** To turn on VoiceOver, go to settings , select General on the left-hand side menu and locate Accessibility from the right-hand side. VoiceOver is the first option in the Accessibility menu. To turn this on, tap the button on the right of VoiceOver. The button should turn green and a black window will appear around the first top left item on your screen called the VoiceOver cursor. Alternatively, you can use the VoiceOver shortcut option (please see step 8). To turn VoiceOver off, use a double tap gesture.



**Step 2:** You can adjust the speaking rate by double-tap and holding on Speaking Rate while moving your finger to the left (towards the tortoise) to slow down VoiceOver or to the right (towards the hare) to speed the speaking rate up.



**Step 3:** When you turn on VoiceOver, the option VoiceOver Practice will appear underneath in blue. You will need to double tap (tap two times) to open VoiceOver Practice. Instead of using a double tap gesture, you can also touch and hold with one finger whilst tapping with another finger. Once open, you can practice the following basic gestures.



**Step 4:** Touch or drag your finger over the screen and VoiceOver will read each item that is touched. VoiceOver always starts at the top left of the screen. You can also scroll through all the items by swiping to the left or right with one finger. To find a particular item on a screen, triple-tap with two fingers to open Item Chooser which will give you a list of all the items on the screen. Then you can search for an item in the search field, swipe left or right to move through the list alphabetically or touch the right of the screen and scroll through the table index.



**Step 5:** To choose an item, double-tap with one finger. You can also touch and hold and tap with another finger to choose an item (called a split-tap)



**Step 6:** To move between screens, drag three fingers to the left or right. VoiceOver will automatically make a beeping noise to indicate a new screen. By swiping three fingers down, Spotlight Search will open at the top of the screen which can be used to find any content on the iPad including apps.



**Step 7:** To scroll up and down on a screen, again use three fingers to swipe up or down. It is important to note that in split screens such as those found in Settings, you need to tap either the left or right column to indicate which column you want VoiceOver to read.



**Step 8:** Instead of having to turn VoiceOver on and off using the VoiceOver menu in Settings (see step 1), you can set up a shortcut so that VoiceOver will turn on and off when you triple-tap the Home Button. To do this, open Settings, select General from the menu on the left-hand column and then Accessibility from the right-hand side column. Scroll to the bottom of the Accessibility menu (the right-hand column) and select Accessibility Shortcut. Now select VoiceOver from the right-hand side. Come out of Settings and press the Home Button 3 times. VoiceOver will then automatically be activated. Repeat to turn VoiceOver off.

#### **Other useful hints include:**

In the VoiceOver menu within Settings, scroll down and choose Large Cursor- This will make the cursor bigger and bolder which will make it easier to see for children and young people with functional vision.

Tap the screen four times with three fingers – This will turn the ‘screen curtain’ on which will make the screen appear blank. It is useful for privacy or if the display is not needed. Repeat the gesture to make the text appear again.

Triple-tap with three fingers – This will mute VoiceOver. Repeat to unmute.

Two-finger swipe up – This will read all items from the top of the screen.

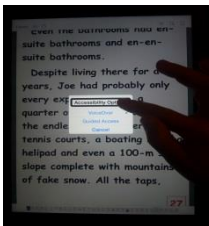
If you have any difficulties in using VoiceOver, please use the following link to find Apple User Guides which contain full details of Accessibility Features:

<http://support.apple.com/manuals/>

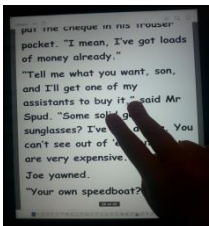
Please note that accessibility features on electronic devices are updated regularly and therefore can change. This guide is designed to be as universal as possible for Apple devices, but you may find slight differences depending on the operating system (or iOS) your device is using.

## How to use VoiceOver in iBooks

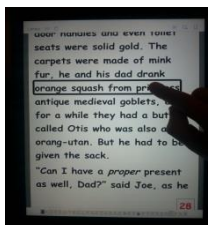
This quick start guide is designed to help you get started using the Apple accessibility feature called VoiceOver which is a screen reader in iBooks. This will read the book out loud and can even describe pictures if this has been set up when the electronic copy of the book was made. It is highly recommended that you are familiar with our VoiceOver guide and use the VoiceOver Practice option to rehearse the following steps using gestures (finger movements) before opening iBooks as the gestures are different than those you usually use on an iPad.



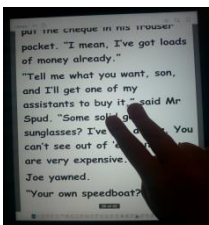
**Step 1:** Turn VoiceOver on. This can be done before or after iBooks is open (see VoiceOver guide). VoiceOver will automatically begin reading and turning the pages.



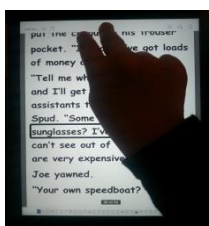
**Step 2:** To pause VoiceOver, tap on the screen with two fingers. It doesn't matter whereabouts you tap or even if you use one finger from one hand and one finger from the other hand. To unpaue VoiceOver, tap on the screen with two fingers again.



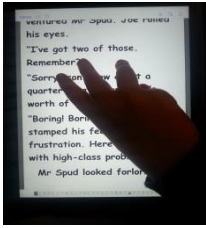
**Step 3:** If you tap on a line of text with a single finger, it will read the line and then stop.



**Step 4:** To continue reading from where it stopped, stroke two fingers down the screen. Again it doesn't matter which fingers or used or where on the screen this is performed.



**Step 5:** By stroking two fingers towards the top of the screen, VoiceOver will read from the top of the screen.



**Step 6:** To move to the next screen, stroke 3 fingers from the right to the left of the screen. As long as three fingers are touching the screen, it doesn't matter which ones are used. To move to the previous screen, stroke 3 fingers from the left to the right of the screen.

**Other useful gestures include:**

A single three-finger tap – This will give you any additional information such as whether text is selected.

A single four-finger tap at the top of the screen - This will select the first item on the page.

A single four-finger tap at the bottom of the screen – This will select the last item on the page.

Tap the screen four times with three fingers – This will turn the 'screen curtain' on which will make the screen appear blank. Repeat the gesture to make the text appear again.

Now that you are confident with the gestures to use VoiceOver in iBooks, open iBooks and have a try!

If you have any difficulties in using VoiceOver in iBooks, please use the following link to find Apple User Guides which contain full details of Accessibility Features:

<http://support.apple.com/manuals/>

Please note that accessibility features on electronic devices are updated regularly and therefore can change. This guide is designed to be as universal as possible for Apple devices, but you may find slight differences depending on the operating system (or iOS) your device is using.

# Unit 5 – Alternative Ways of Recording

## **Aim**

For pupils with vision impairments to confidently input text and use their voice with an iPad to successfully complete a range of tasks required within their education setting.

## **Purpose**

Within education settings, there is often a focus on meeting outcomes by writing tasks. For pupils with vision impairments, this can be tiring and it may not reflect the pupil's true ability. By providing pupils with a toolkit of alternative ways of producing work, they are enabled to produce work towards lesson outcomes using a range of strategies alongside their fully-sighted peers.

## **Let's tailor it! - Baseline**

- What can they already do/explain? (Using the Skills Progression Checklist for Unit 5, baseline your pupil (B/L) to identify what skills they already have in order to progress through this unit.)
- What do they want to be able to do?
- What would their parent/carer like/need them to be able to do?
- What would their teacher like/need them to be able to do?

## 5a. Voice-Recording

### Outcome

The pupil can use in-built speech-to-text tools on an iPad in order to record their work.

### Medium-Term Plan

Lesson	Outcome	Key Skills	Key Knowledge	Links to Other Units
Lesson 1: Developing Confidence in Voice-Recording	Confidently engage in a recording app to voice record.	<ul style="list-style-type: none"> <li>•To hold a sentence</li> <li>•Record clearly</li> <li>•Activate basic voice-recording apps</li> </ul>	<ul style="list-style-type: none"> <li>•How and when voice-recording apps can help to produce work</li> </ul>	Unit 5b
Lesson 2: Applying Images to Recording Apps	The pupil can demonstrate how to record sequentially using the built-in camera app.	<ul style="list-style-type: none"> <li>•Use the camera to take clear photos of a whole object/images</li> <li>•Import images into recording apps</li> <li>•Record multiple sentences in succession</li> </ul>	<ul style="list-style-type: none"> <li>•What distance or position is needed to take a good photo and how this changes depending on a range of factors i.e. size of the object</li> </ul>	Unit 3: Lesson 3

			<ul style="list-style-type: none"> <li>•How and when more complex recording apps can be used to complete tasks</li> </ul>	
Lesson 3: Using Dictation	Orally record clear sentences in appropriate word-processing apps using Dictation.	<ul style="list-style-type: none"> <li>•Activate Dictation</li> <li>•Use clear sentences including punctuation to record</li> </ul>	<ul style="list-style-type: none"> <li>•How and when Dictation can help to produce work</li> </ul>	

## iPad Accessibility Skills

### Unit 5 - Alternative ways of recording - Voice Recording and Inputting Text

Using the Camera App for photos	Progression		
Basic Skills	Introduce	Developing	Achieved
Take a photo			
Take a panoramic photo			
take a selfie			
Intermediate Skills			
Photo Options			
Using the flash			
Adjust focus and exposure			
Align your shots			
Adjust the shutter sound volume			
Use the timer			
Zoom in or out			
Advanced Skills			
Take Burst Shots			
Take a Live Photo			
Adjust HDR camera settings on iPad			

# iPad Accessibility Skills

## Unit 5 - Alternative ways of recording - Voice Recording and Inputting Text

Using the In-Built Camera App for Videos	Progression		
Basic Skills	Introduce	Developing	Achieved
Record a video			
<b>Advanced Skills</b>			
Record a slo-mo video			
Capture a time lapse video			
Using the Camera App for photos	Progression		
Basic Skills	Introduce	Developing	Achieved
Take a photo			
Take a panoramic photo			
take a selfie			
<b>Intermediate Skills</b>			
<b>Photo Options</b>			
Using the flash			
Adjust focus and exposure			
Align your shots			
Adjust the shutter sound volume			
Use the timer			
Zoom in or out			

<b>Advanced Skills</b>			
Take Burst Shots			
Take a Live Photo			
Adjust HDR camera settings on iPad			
<b>Editing photos and videos</b>			
Adjust light and colour			
Apply filter effects			
<b>Crop, rotate, or flip a photo or video</b>			
Crop manually or to a preset ratio			
Rotate			
Flip			
Straighten and adjust perspective			
Mark up a photo			
Trim a video			
View photos and videos			
Share or print photos			
<b>Taking photos in Photo Booth</b>			
Take a photo			
Delete a photo			
Share a photo			
Copy a photo			

# iPad Accessibility Skills

## Unit 5 - Alternative ways of recording - Voice Recording and Inputting Text

Input text using the onscreen keyboard with VoiceOver	Progression		
Basic Skills	Introduce	Developing	Achieved
<b>Enter text with onscreen keyboard</b>			
Standard typing			
Touch typing			
Direct touch typing			
Change typing mode			
<b>Intermediate Skills</b>			
<b>Edit text with onscreen keyboard</b>			
Move the insertion point			
Delete a character			
Select text			
Cut/copy/paste			
Undo			
<b>Advanced Skills</b>			
Change keyboard settings			
Change Feedback options			
Change Rotor options			
Change Verbosity options			

# iPad Accessibility Skills

## Unit 5 - Alternative ways of recording - Voice Recording and Inputting Text

Input text using Braille screen input	Progression		
<b>Basic Skills</b>	Introduce	Developing	Achieved
Set up Braille Screen Input			
Turn Braille Screen Input on and off			
<b>Advanced Skills</b>			
<b>Supplement iPad keyboard Braille with gestures</b>			
Learn most common gestures (see instructions)			
Change Braille Screen Input settings			

# iPad Accessibility Skills

## Unit 5 - Alternative ways of recording - Voice Recording and Inputting Text

Notes App	Progression		
Basic Skills	Introduce	Developing	Achieved
Create a note			
Format a note			
Add a Checklist			
Add Checklist			
Add items			
Increase/decrease indentation			
Mark an item as complete			
Re-order an item			
Manage items in the list			
Intermediate Skills			
Add and edit a table			
Add table			
Enter text			
Move to the next cell or row			
Format a row or column			
Add/Delete/Move a row or column			
See more columns			
Convert table to text			

<b>Change how Notes is displayed</b>			
Make the note fill the screen			
Show lines or grids in Notes			
<b>Draw or write using the Apple Pencil or your finger</b>			
Draw or write in a note			
Change colour or tools			
Adjust the handwriting area			
<b>Advanced Skills</b>			
Select and edit drawings and handwriting			
Use handwritten addresses, phone numbers, dates, and more			
Add attachments to notes			
Add a photo or video			
Draw on a photo attachment			
To save photos and videos taken in Notes to Photos			
<b>Scan</b>			
To scan a document into a note using the camera			
Add more pages			
Crop the image			
Apply a filter			
Rotate the image			
Mark up the document			
Delete the scan			

Add info from another app to a note			
<b>Lock your notes on iPad</b>			
Set up your Notes password			
How to lock a note			
How to open a locked note			

# iPad Accessibility Skills

## Unit 5 - Alternative ways of recording - Voice Recording and Inputting Text

Using the Microsoft Word app	Progression		
Basic Skills	Introduce	Developing	Achieved
Create a document			
Be familiar with the Home tab			
Save a document			
Navigate a document			
<b>Page layout</b>			
Choose margins			
Choose orientation			
Choose size			
Choose columns			
Choose breaks			
Enter text			
Undo and Redo actions			
<b>Format text</b>			
Select a word or paragraph			
Change the font			
Change the font size			
Add Bold/Underlining/Italics			

Add more formatting options			
Highlight text			
Change font colour			
Add bullet or numbered lists			
Indent a paragraph			
Paragraph formatting			
Apply a style			
<b>Format text with shortcut bar</b>			
Indent a paragraph (this button may not be present depending on iPad model)			
Undo and Redo			
Cut/Copy/Paste			
Predictive text and correction			
Bold/underline/italicise text			
<b>Alternative editing options</b>			
Using editing options displayed above word or paragraph			
Using gestures			
Print			
Use sharing and sending options			

## iPad Accessibility Skills

### Unit 5 - Alternative ways of recording - Voice Recording and Inputting Text

Using the Microsoft Word app	Progression		
Intermediate Skills	Introduce	Developing	Achieved
<b>Insert Tab</b>			
Insert page break			
Add a table			
Take a photo/add a photo			
<b>Draw Tab</b>			
Draw shapes and objects			
Annotate documents			
Use the eraser			
Switch between the eraser, pencil, pens and highlighters			
Make the pencil/pen/highlighter thicker or thinner			
<b>Review Tab</b>			
Proofing Tools			
Smart Lookup			
Word Count			
Read Aloud			

<b>View Tab</b>			
Find and replace			
Choose between print layout or mobile view			
View document headings			
Use Immersive Reader			
Ruler display			
One page/page width			
Zoom in or out			

# iPad Accessibility Skills

## Unit 5 - Alternative ways of recording - Voice Recording and Inputting Text

Using the Microsoft Word app	Progression		
Advanced Skills	Introduce	Developing	Achieved
<b>Insert Tab</b>			
Add Shapes/Text Box/Icons			
Insert Hyperlinks			
Add Comments			
Add Headers and Footers			
Add Page Numbers			
Add Footnotes and Endnotes			
Add mathematical and scientific equations			
<b>Draw Tab</b>			
Add more pens/pencils/highlighters			
Rearrange the pens icons in your list			
<b>View and Review Tab</b>			
Add or remove comments			
Display for review			
Accept or reject changes made to a document			
Use In-built help			
Install Add-ins			

# iPad Accessibility Skills

## Unit 5 - Alternative ways of recording - Voice Recording and Inputting Text

Using the Microsoft Excel app	Progression		
Basic Skills	Introduce	Developing	Achieved
Open up App settings			
Open a saved spreadsheet			
Open spreadsheet/file shared with you			
Open new spreadsheet from Template			
Open new blank spreadsheet			
Save and name a spreadsheet			
Set autosave			
Share a spreadsheet whilst you are working within it			
Share a spreadsheet from a saved area			
Rename a spreadsheet			
Delete a spreadsheet			
Be familiar with the various interfaces/menus			
Add new sheets			
Rename sheets			
Move sheets			
Duplicate sheets			
Print			

<b>Data Entry</b>			
Enter text in a cell			
Undo/Redo			
Resize rows and columns			
Identify the context menu			
Cut/Copy/Past/Edit in a cell			
Comment to mark up work			
Use the Speak selection			
Select multiple cells			
Change font type/size/colour			

# iPad Accessibility Skills

## Unit 5 - Alternative ways of recording - Voice Recording and Inputting Text

Using the Microsoft Excel app	Progression		
Intermediate Skills	Introduce	Developing	Achieved
<b>Intermediate Skills - Formatting Cells and Groups of Cells</b>			
Edit cell borders			
Merge cells			
Word wrapping			
Formatting numbers e.g. currency, decimal, date/time/percentage			
Insert and delete rows and columns			
Change cell size			
Clearing content in a cell			
Clearing format in a cell			

# iPad Accessibility Skills

## Unit 5 - Alternative ways of recording - Voice Recording and Inputting Text

Using the Microsoft Excel app	Progression		
Advanced Skills - Sorting and Filtering Data	Introduce	Developing	Achieved
Using Autosum			
Using Average			
Add maths functions using formula and standard spreadsheet functions			
Sort and filter data			
Advanced Skills - Inserting Add ons			
Insert a table			
Editing a table			
Insert a photo			
Editing a photo			
Insert a shape			
Edit a shape			
Insert a text box			
Edit a text box			
Insert an icon			
Edit an icon			
Insert a chart			

Edit a chart			
Drawing using Apple Pen/finger			
Be familiar with the View Menu			
Use the Search feature			

# Lesson 1: Developing Confidence in Voice-Recording

## Outcome

Confidently engage in a recording app to voice record.

## Preparation

You will need to download apps such as PlayButton or iTalk.

## E-Safety

Discuss gaining consent before taking photos of others.

## Key vocabulary

Record, play, stop

## Activity

Model using a simple recording app i.e. PlayButton, iTalk or the inbuilt camera with video function as a tool to record developing ideas which can be played back. Develop familiarity with the appropriate recording app and its icons, encouraging the pupil to plan what they are going to say before recording their ideas using a 'Think, Say, Record' technique. The pupil may begin by recording words before extending to short sentences etc., developing their confidence in recording and hearing their voice. Discuss the purpose of the app and when it would be an appropriate alternative/supplement to an adult scribing or the pupil writing/braille. Begin to encourage the pupil to listen and improve their sentences to make them clearer.

## **Tailor It!**

- Use images, models, real objects etc. as stimuli.
- Model sentences for the pupil to record if required.
- Use VoiceOver to access Playbutton or iTalk in line with their VoiceOver skills (see Unit 5b).

## **Let's Apply!**

- Provide in-class opportunities to apply the familiar recording app to support access.
- Apply the familiar recording app to support the pupil to hold sentences i.e. while they are brailleing their sentence.
- Encourage the pupil to apply their developing recording skills to apps such as Doodlecast, Puppet Pals and/or Chatterpix Kids.

## **Think SMART!**

**S** – How clear do you expect the pupil to be? What do you expect them to have recorded i.e. sentence, word?

**M** – How many words or sentences do you expect them to record? On how many occasions do you expect them to be clear i.e. meaning is understood?

**A** - How much scaffolding does the pupil need to achieve the outcome?

**R** – Is the pupil verbal? If so, is their voice intelligible enough that they will be able to progress in the unit and eventually use Dictation?

**T** – Was the pupil very confident and clear in voice-recording during one lesson or do they need more occasions to develop their ability to speak clearly and confidently?

# Instructions for Lesson 1: Using the In-Built Camera App for Videos

## Videos

The iPad's Camera app can also be used to record videos, including slow-motion and time-lapse videos.

### Record a video

- Tap on Camera app
- Choose Video mode.
- To start recording, tap the Record button (the round red button) or press one of the volume buttons. A green dot will appear at the top of the screen to show when you are recording.
- To stop recording, tap the Record button or press the volume button again.

You can change default video recording settings by going to Settings > Camera > Record Video.

### Record a Slo-Mo video

- Tap on Camera app
- Choose Slo-Mo.
- Tap the record or a volume button to start and then stop recording, in the usual way.

You can also opt to have just a part of the video playing in slow motion:

- Tap the video thumbnail
- Tap Edit
- Use the vertical bars below the frame viewer to select the section you want in slow motion.
- You can now change the frame rate (to set the slow-motion effect) and the resolution.

To change Slo-mo recording settings, go to Settings > Camera > Record Slo-mo.

## **Capture a time-lapse video**

You would use this to capture something that happens slowly over time – a Morning Glory flower opening, a sunset, children flooding into school.

- Go into Camera and choose Time-lapse mode.
- Set up your iPad to capture the event.
- Tap the Record button to start recording; tap it again to stop recording.

Some iPad models enable you to adjust Auto FPS settings, which can improve the video quality in low light levels. Go to Settings > Camera > Record Video, then do one of the following:

- On iPad Air (4th generation), tap Auto FPS, then apply Auto FPS to only 30-fps video or to both 30- and 60-fps video (iPadOS 14.2 or later).
- On iPad Pro 11-inch and iPad Pro 12.9-inch (3rd generation and later), turn on Auto Low Light FPS.

## Lesson 2: Applying Images to Recording Apps

### Outcome

The pupil can demonstrate how to record sequentially using the built-in camera app.

### Links to Previous Learning

Continue to encourage the pupil to develop their ability to think, say and then record in order to produce oral sentences which are clear and concise before listening to them in order to improve them.

### Preparation

You will need to download apps such as My Story for iPad and Videolicious.

### E-Safety

Discuss gaining consent before taking photos of others.

### Key Vocabulary

Record, play, stop, Camera, Photos

### Activity

Using the built-in camera app, discuss the purpose of taking photos as a tool to record information. Develop the pupil's ability to take photos of whole objects using the capturing button. Once the pupil is confident with the camera function, introduce an app such as 'My Story for iPad' or 'Videolicious' as a tool to produce longer pieces of work which include images. Model completing all the necessary steps to produce a recorded piece of work e.g. a story, instructions, recount etc before providing backwards chaining for the pupil to import images into the app and record accompanying sentences.

## Tailor It!

- Command Siri to take photos and find images.
- Challenge the pupil to take photos of objects at different distances depending upon their level of functional vision.
- In association with Lesson 3, Unit 3, apply Magnifier when using the camera app.
- Although pupils who are severely sight impaired or have no functional vision at all may still enjoy taking photos using VoiceOver, you may like to also model using Siri in order to produce Notes (“Create Note” or “Write Note”), encouraging the pupil to produce gradually more sentences using Siri which are clear.
- Engage in real experiences i.e. linked to their school curriculum as a stimulus such as decorating a cake or planting a bulb.
- In line with their VoiceOver skills, if appropriate, model how to apply VoiceOver to activate the camera.

## Let’s Apply!

- Demonstrate how to copy images from Safari into the camera roll in order to use as a stimulus, ensuring that images are accessible for the pupil.
- Look for opportunities for the pupil to meet outcomes in class by taking images and voice-recording as an alternative way to record work. Teachers could be encouraged to utilise this strategy with the rest of the class, asking the pupil with vision impairment to assist where appropriate.
- Encourage homework to be produced in this format where appropriate.
- Demonstrate this lesson to other professionals working with the pupil who can also apply familiar recording apps i.e. Habilitation, OT, SALT.
- Utilise apps such as My Story for iPad as a home-recording tool so that the pupil can demonstrate how they successfully completed an additional curriculum outcome within the home environment i.e. spread butter on toast.

## Think SMART!

**S** – Which app do you expect the pupil be able to successfully record in? What do you expect them to have recorded? What do you expect them to have taken photos of? At what distance?

**M** – How many sentences will you expect to be clear and/or linked to the image?  
How many clear images do you expect the pupil to have produced?

**A** - How much scaffolding does the pupil need to achieve the outcome?


**R** - Is the pupil verbal? If so, is their voice intelligible enough that they will be able to progress in the unit and eventually use Dictation? If their voice is not intelligible enough, the pupil could focus on their camera skills.

**T** - Will the pupil be able to successfully take clear photos of whole objects before recording sentences within one lesson or will the activity need to be broken down over a number of lessons i.e. the first lesson be focussed on taking photos.

## Instructions for Lesson 2

### Taking and editing photos and videos with Camera, Photos and Photo Booth

#### Taking photos

- Tap on the **Camera** app icon on the Home Screen 
- Alternatively, swipe left on the Lock screen.

Either option will take you directly into Photo mode, which is the basic option for taking photos. If you hold the iPad up, you will see the image the lens (on the back of your iPad) is capturing.



- Tap the Shutter button, or press either volume button, to take the picture.

The iPad has a variety of different photo options to try, which are accessed via the Mode Selector at the bottom right. Depending on your iPad model, these may include Video, Slow-Mo, Pano and others. The current option is high-lighted in yellow. Flick up or down to see other options, and tap to select.

#### Taking a panoramic photo

- Select Pano mode from the photo screen.
- A line with an arrow will appear in the centre of the screen. To take your Panorama, press the round white Shutter button and slowly, smoothly you're your iPad around in the direction of the arrow. You can tap the arrow if you'd like the pan the opposite way. Vertical panning is also possible by turning the iPad 90 degrees to landscape orientation.
- When you have finished, tap the Shutter button again.


#### Taking a selfie

- Depending on your iPad model, tap either  or  to switch from the rear to the front camera.
- Hold your iPad in front of you, and tap either the Shutter or a volume button to take the picture.

You can also take a ‘mirrored’ selfie, which captures the shot as you are seeing it in the iPad screen. Do this by going to **Settings**, tapping on Camera, and then turning on Mirror Front Camera or Mirror Front Photos.


## Photo options

### Using the flash

To turn the flash on or off on models that support it, tap the flash icon , and then choose Auto (for automatic flash), On, or Off.


### Adjusting focus and exposure

These are automatically set by the iPad camera but you can manually adjust them in this way:

- When in the Photo screen, tap on the screen to reveal the automatic focus area and exposure setting.
- Tap where you want to move the focus area.
- Change exposure (light settings) by dragging the light settings icon  up or down to adjust the exposure.

To remove the auto focus and exposure settings for future photos, touch and hold the focus area until you see AE/AF Lock. Then tap the screen to Unlock settings.


### Align your shots

To display a grid on the camera screen that can help you straighten your shots, go to Settings  > Camera, then turn on Grid.

### Adjust the shutter sound volume

- This can be adjusted using the volume buttons on your iPad.
- Alternatively, when Camera is open, swipe down from the top right of the screen to open the Control Centre, then drag the volume icon slider up or down.

## Using the timer

To set a timer, ensure your iPad is steady and the photo is set up. When ready, tap the timer icon , then select your delay: either 3s or 10s. The iPad will automatically capture the image at that time.

## Zooming in or out

On all models, you can pinch the screen to zoom in or out.


Alternatively, drag the slider on the left-hand side of the screen up or down. Moving the dial up makes you zoom in, and down, zoom back out again.

## Advanced photo options

### Take Burst shots


Burst takes multiple high-speed photos so that you have a range of photos to choose from.

- Choose Photo or Square mode.
- Touch and hold the Shutter button to take rapid-fire photos. The counter shows how many shots you took.
- Lift your finger to stop.
- To select the photos you want to keep, tap the Burst thumbnail, then tap Select.
- Gray dots below the thumbnails mark the suggested photos to keep.
- Tap the circle in the lower-right corner of each photo you want to save as an individual photo, then tap Done.

To delete the entire group of Burst photos, tap the thumbnail, then tap .

### Take a Live Photo

On some iPad models, there is the option to take a Live Photo. This is where the iPad captures images and audio from just before and after you take your photo as well as when you actually press the shutter button. To choose Live Photo:

- Choose Photo mode
- Tap  to turn Live Photos on (yellow is on) or off.
- Tap the Shutter button to take the shot.

In your albums, Live Photos are marked with “Live” in the corner.

## Adjust HDR camera settings on iPad

Where available, HDR (High Dynamic Range) takes 3 photos in rapid succession and with slightly different settings before merging them together to give you a version which is better than its components parts.

The iPad will automatically use HDR when it considers it would be useful but you can opt to manually control HDR instead.

- On some models, you will need to tap on Settings, then Camera, and opt to turn OFF Smart HDR. This will then give you the option of tapping HDR ON or OFF when on camera screen.
- On other iPad models, you will be able to tap on HDR on the camera screen to turn it on or off.

By default, the HDR version of the photo is saved in Photos. To keep the non-HDR version, you will need to opt to Keep Normal Photo within Camera settings.

For other advanced settings not covered here, including advanced Selfie options, please see: [Take photos with your iPad camera - Apple Support](#)

## Editing photos and videos

The in-built Photos app, reached within Camera, can be used to easily and professionally edit photos and videos.

### Adjust light and colour

- View your photo or video in full screen by tapping on the thumbnail.
- Tap Edit to reach the edit screen.

There are 3 menus, each represented by icons to the left-hand side of the picture. You will go into the first one, Light and Colour menu, automatically. The options can be seen down the right-hand side of the picture by flicking up or down through the list.

- Tap on an editing effect such as Brilliance, Highlights or Shadows, and drag the slider to adjust the effect. Tap the effect button to see how your photo looked before and how it looks after.
- If you are happy with your changes, tap Done to save and exit.
- Otherwise tap Cancel and confirm that you want to Discard Changes.

## Apply filter effects

- View your photo or video in full screen by tapping on the thumbnail.
- Tap Edit to reach the edit screen.
- Tap on the Filters icon on the left side of the screen to bring up the Filter effects menu to the right of the picture. Again, drag the slider to adjust the effect.
- To compare the edited photo to the original, tap the photo.
- If you are happy with your changes, tap Done to save and exit.
- Otherwise tap Cancel and confirm that you want to Discard Changes.

## Crop, rotate, or flip a photo or video

- View your photo or video in full screen by tapping on the thumbnail.
- Tap Edit to reach the edit screen.

**Crop manually:** The photo is surrounded by a frame. Drag the corners of the frame to enclose the area you want to keep in the photo. Alternatively, you can pinch within the photo to make the part you want larger to fit.

**Crop to a preset ratio:** Tap the ratio icon at the top of the screen. Options are presented along the bottom; tap on your choice.

**Rotate your photo:** Tap the rotate photo icon at the top of the screen to rotate the photo 90 degrees. You can do this more than once if necessary

**Flip your photo:** Tap the flip icon at the top of the screen to flip the image horizontally. Tapping this twice will take you back to where you started.

Tap Done to save your edits. Otherwise, tap Cancel and confirm that you wish to Discard Changes.

## Straighten and adjust perspective

- Tap a photo or video thumbnail to view it in full screen and then tap Edit at the top of the screen to enter the Edit menu.
- Tap on the Rotation/Crop icon on the left side of the screen, and view the Rotation/Crop menu options to the right of the photo. Tap on your selection and use the slider to adjust the effect, as previously.

Tap Done to save your edits. Otherwise, tap Cancel and confirm that you wish to Discard Changes.

## Mark up a photo

- Tap a photo or video thumbnail to view it in full screen and then tap Edit at the top of the screen to enter the Edit menu.
- Tap the options icon.
- Tap Markup.
- Annotate the photo using the different drawing tools and colours. Tap to add shapes, text, or even your signature.

Tap Done to save your edits. Otherwise, tap Cancel and confirm that you wish to Discard Changes.

## Trim a video


- Open the video, then tap Edit to enter the Edit menu.
- You will see the video in frame viewer. Drag either end to adjust the length of the clip. Tap Done when you are happy.
- Tap Save Video to save only the trimmed video, or Save Video as New Clip to save both versions of the video.

N.B. You can revert to the original image from an edited photo by opening the edited image, tapping Edit and then tapping Revert. Choose Revert to Original.

## Viewing your photos and videos

- In Camera, tap the thumbnail image below the Shutter button.
- Swipe right to see the photos you've taken recently.
- Tap the screen to show or hide the controls.
- Tap All Photos to see all your photos and videos saved in Photos.

## Sharing or printing your photos

- While viewing an image, tap the upload icon .
- Select an option such as Mail, or Messages to share your photo.
- If your iPad is linked to a printer, you can also swipe up to select Print from the list of options.

For how to scan a QR code with the iPad camera, see: [Scan a QR code with the iPad camera - Apple Support](#)

## Taking photos in Photo Booth

Photo Booth is the 'fun' little brother of Camera, and allows you to add funny and unusual effects to selfies and photos.

### Take a photo

Aim the iPad at your subject to frame your shot. The screen will show you your subject with a different effect in each tile, including Stretch, X-Ray and many, many more. The tile in the centre shows you the picture without effects. Simply tap the tile to select the effect you like.

Once you have chosen your effect you can switch between rear- and front-facing cameras by tapping the reverse camera icon at the bottom right.

To go back and try a different setting, tap on the filters icon on the bottom left of the screen.

With some effects e.g. Swirl, you can drag your finger across the screen, or pinch, swipe, or rotate the image to alter the appearance.

Tap the shutter button when you are ready to take the shot. iPad will make a shutter sound. To adjust this, use the volume buttons or see [Adjust the volume on iPad](#).

## Deleting, sharing or copying a photo

### Deleting

Tap the thumbnail of your photo at the bottom of the screen, then tap the Delete icon.

### Sharing/ copying

Tap the thumbnail of your photo, tap on the Upload icon (a page with an up-arrow).

The menu will give you various options for sharing across the top of the menu screen: by Airdrop in Message, Mail and others. Tap on your selection and follow the instructions.

You also are given the option to Copy your photo, add it to a shared Album or Save to your files. Again, tap on your instructions and indicate where you want the photo to be saved or copied to.

## Lesson 3: Using Dictation

### Outcome

Orally record clear sentences in appropriate word-processing apps using Dictation.

### Preparation

You will need to ensure a word-processing app or Notes is downloaded onto the pupil's iPad and Dictation is enabled from the Settings menu.

### Links to Previous Learning

Continue to encourage the pupil to develop their ability to think, say and then record in order to produce oral sentences which are clear and concise before listening to them in order to improve them.

### Key vocabulary

Dictation

### Activity

Introduce the pupil to the Dictation tool, modelling how to use this in order to record information within familiar apps. Provide guidance in order to develop the pupil's ability to record information using the Dictation tool. Encourage the pupil to plan what they are going to say before recording their ideas and listening back to them in order to improve them if appropriate. Encourage the pupil to identify when to apply the Dictation tool in order to produce work to alleviate visual fatigue. Then develop the pupil's ability to use voice commands to initiate

dictation functions within enabled word-processing apps, applying formatting and punctuation where appropriate.

### **Tailor It!**

- Use a word-processing app which will be useful within the classroom environment for the pupil.
- If required, demonstrate how to locate Dictation using the onscreen keyboard with VoiceOver (in line with the pupil's VoiceOver skills).
- If the pupil uses an external keyboard, demonstrate how to activate and deactivate Dictation using this instead.
- Ensure that dictated words are accessible on the screen for the pupil i.e. large enough font, contrast is appropriate etc.
- Modify the amount of punctuation and/or formatting used when dictating.

### **Let's Apply!**

- Look for opportunities for the pupil to dictate their work within the classroom and home environment.
- Practise using the Dictation tool as part of preparation for assessments.

### **Think SMART!**

**S** - Which app do you expect the pupil be able to successfully record in? What do you expect them to have recorded?

**M** - How many sentences will you expect to be clear? How many lessons per week would you expect the pupil to utilise Dictation? How many steps do you expect the pupil to complete in order to record using Dictation?

**A** - How much scaffolding does the pupil need to achieve the outcome?


**R** – Is the pupil ready to use the Dictation tool i.e. are their sentences clear and they are no longer using filler words such as 'erm'?

**T** – Will the pupil be able to confidently complete all steps to use Dictation including all appropriate punctuation and formatting or will the activity need to be broken down over more lessons?

# Instructions for Lesson 3: Using Notes

The Notes app is used for note-taking, making lists, organising information and sketching.

## Creating a new note

To create a new note, you can either ask Siri, saying something like “Siri, create a new note” or else tap on the Notes icon 

Note that the first line you enter will automatically become the note’s title. To edit the title, scroll to the top of the note, then tap Edit. You can also opt for a default style for the first line in all new notes, go to Settings > Notes > New Notes Start With.

## Formatting your note

- To change the formatting, tap the text icon **Aa**.
- You can apply a heading style, bold or italic font, a bulleted or numbered list, and more.
- To save the note, tap Done.

## Adding a checklist

In a note, tap the checklist icon , then do any of the following:


**Add items to the list:** Enter text, then tap return to enter the next item.

**Increase or decrease the indentation:** Swipe right or left on the item.

**Mark an item as complete:** Tap the empty circle next to the item to add a checkmark.

**Reorder an item:** Touch and hold the empty circle or checkmark next to the item, then drag the item to a new position in the list.

## Manage items in the list:

- Tap the list to see the menu, tap , then tap Checklist. You have the option to check individual items, Check All or Uncheck All, and then either Delete Checked or Move Checked to Bottom.
- To automatically sort checked items to the bottom in all your notes, go to Settings > Notes > Sort Checked Items, then tap Automatically.

## Add or edit a table

In a note, tap the table icon , then do any of the following:

**Enter text:** Tap a cell, then enter your text. To start another line of text in the cell, touch and hold the Shift key and tap next.

**Move to the next cell:** Tap next.


**Move to the next row:** Tap next at the last cell.

**Format a row or column:** Tap a row or column selection handle, then choose a style, such as bold, italic, underline, or strikethrough.

**Add or delete a row or column:** Tap a row or column selection handle, then choose to add or delete.


**Move a row or column:** Touch and drag a row or column selection handle to its new position.

**See more columns:** If the table becomes wider than your screen, swipe right or left on the table to see all the columns.

**Convert table to text:** tap on a cell in the table and tap . Choose convert to Text.

## Change how Notes is displayed

**Make the note fill the screen:** Turn the iPad to portrait orientation.

**Show lines or grids in notes:** tap on the settings icon , tap Lines & Grids, then choose a style.

You can also set a default line/grid by tapping on Settings, tapping on Notes, and then tapping on the Lines & Grids menu.

## Draw or write using the Apple Pencil or your finger

Use the Notes app to draw a sketch or jot a handwritten note with Apple Pencil or your finger. You can draw lines with a ruler, select the colour of the pencil line and use a variety of markup tools.

### Draw or write in a note

Start drawing or writing in the note with Apple Pencil. Or to draw or write with your finger, tap the pencil icon .

Do any of the following:


**Change colour or tools:** use the markup tools

**Adjust the handwriting area:** Drag the resize handle (on the left) up or down.

## Select and edit drawings and handwriting

With Smart Selection, you can select handwritten text using the same gestures you use for typed text. You can move, copy, or delete the selection within the note. You can even paste it as typed text in another note or app.

N.B. Smart Selection and handwriting transcription require your iPad language to be set to English.

Select drawings or handwriting by tapping the Lasso tool  (between the eraser and ruler in the Markup menu) and then using any of the following methods:

- Touch and hold, then drag to expand the selection. Adjust, if necessary by dragging the handles.
- Double-tap to select a word.
- Triple-tap to select a sentence.
- Tap the selection, then choose Cut, Copy, Delete, Duplicate, Copy as Text, or Insert Space Above.

If you Copy as Text, you can paste the transcribed text in another note or another app.

## Use handwritten addresses, phone numbers, dates, and more

A yellow underline appears below handwritten text that's recognized as a street or email address, phone number, date, or other data. Tap the underlined text to take action on it. For example, you can see a street address in Maps, compose an email, call a phone number, or add a calendar event.

## Add attachments to notes on iPad





In the Notes app, you can attach photos, videos, and scanned documents, or information from other apps such as maps and links.

**To add a photo or video:** tap on the camera icon. Choose a photo or video from your photo library, or take a new photo or video. You can change the preview size of attachments by touching and holding an attachment, then tapping Small Images or Large Images.


**To draw on a photo attachment:** tap the photo, then tap the pen icon.

**To save photos and videos taken in Notes to Photos:** tap on Settings, then Notes, then turn on Save to Photos.

**To scan a document into a note using the camera:** tap on the camera icon, then choose Scan Documents. Position iPad so that the document page appears on the screen; iPad automatically captures the page. Otherwise, to manually capture the page, tap the shutter button. Alternatively, press a volume button. To make changes to the saved document, tap it, then do any of the following:

- Add more pages: tap the 'add' icon.
- Crop the image: Tap the cropping icon .
- Apply a filter: Tap the colours icon , then choose to scan the page as a colour, grayscale, or black-and-white document, or as a photo.
- Rotate the image: Tap the rotation icon .
- Mark up the document: Tap , tap the pencil icon, and then use the Markup tools.
- To delete the scan, tap the bin icon.

### **Add info from another app to a note**

- In the other app, open the item you want to share (for example, a map or webpage).
- Tap Share or , then tap Notes.
- Save the item to a new note or choose an existing note.

### **Lock your notes on iPad**

A single password can be used to password protect any sensitive Notes documents on your devices. This could be Face or Touch ID, but you will also need a Notes password.

### **Set up your Notes password**

- Tap on Settings
- Tap on Words and then Password
- Enter a password and also a hint to help you remember it in case you forget because if you reset it, you won't regain access to your old Notes. You can turn on Face- or Touch ID in addition.

If you do need to reset your password, you can do this from Notes > Password > Reset Password.

## How to lock a note

- Open the note, then tap on the Settings icon.
- Tap Lock.

You will still be able to see the note's title in the notes list.

To remove a lock from a note, tap the Settings icon again and then Remove.

## How to open a locked note

- Tap the locked note, then tap View Note.
- To open the note, use Face ID, Touch ID, or your Notes password.

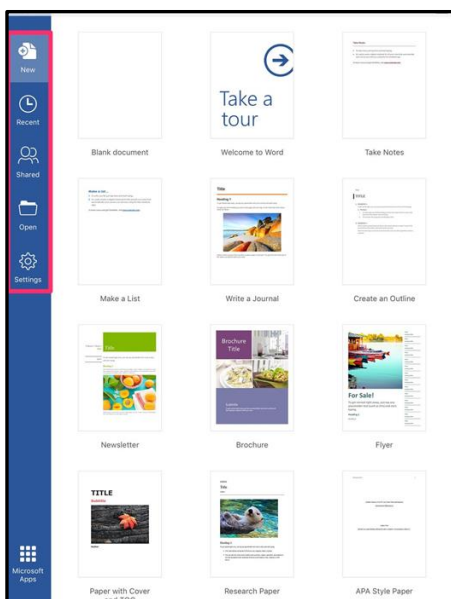
N.B. Opening one locked note will temporarily open all your locked notes.

To lock your notes again, either tap the lock icon at the top of the screen, or tap lock Now at the bottom of the notes list.

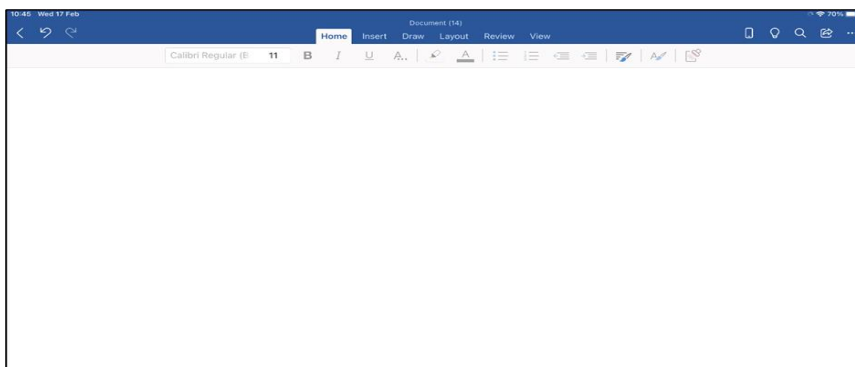
# Instructions for Lesson 3: Using the Microsoft Word App

## Create a document

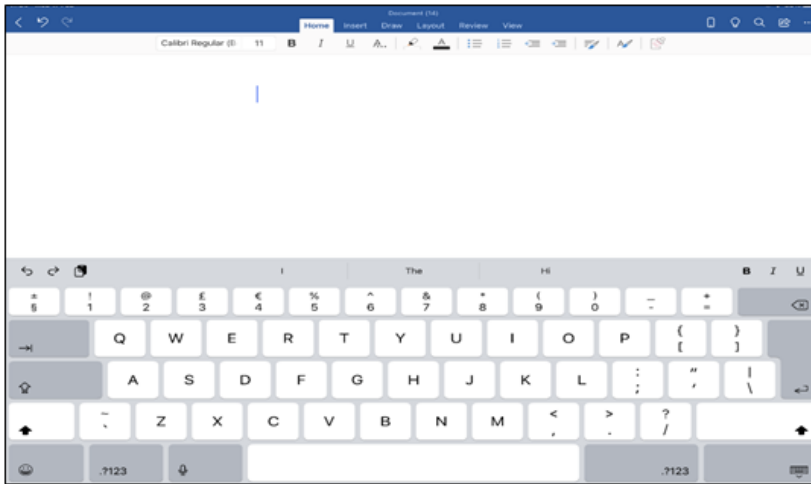
- On the File tab tap on **New** and then tap on the type of document you want. In this example we will select Blank document.



- You will be presented with the screen below with the blue toolbar at the top. Tap on the arrow icon which is the first icon on the left on the blue toolbar. You will then be given the option to come out of the document and either delete the draft or save it. If you choose to save, you will be given options of where to save it. Further saving options are explored later.

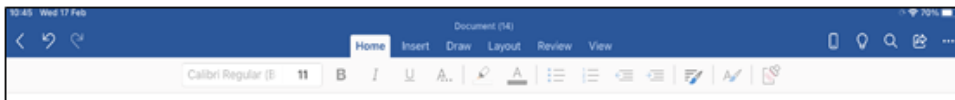


- Once you tap on the screen in order to enter text, you will also see a grey shortcut bar in the middle of the screen. The onscreen keyboard will be underneath.

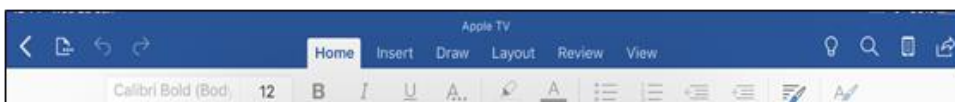


## Home tab

- The home tab on the blue toolbar allows you to choose the text formatting options. With a word or paragraph selected you can choose an option. The tab below is in Office 365.



The Home tab may look like the one below depending on what version of Office is used.



## Saving a document

- It is a good idea to save a document as soon as you create it. Saving early can prevent work from being lost.

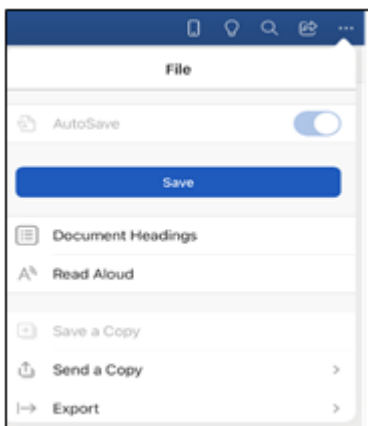
- In the top right corner on the blue toolbar there is an icon with three dots.



Or the icon may be on the left of the toolbar and a picture of a page with three dots depending on the version of Office being used.



Tap on this and you will see the save button as shown below.



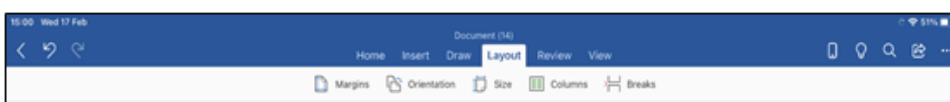
- Tap on Save, give the document a name and save in your chosen location.
- If you go back into this menu above, you can now choose whether you want Autosave turned on or not. It is recommended that this is turned on.

## Navigating a document

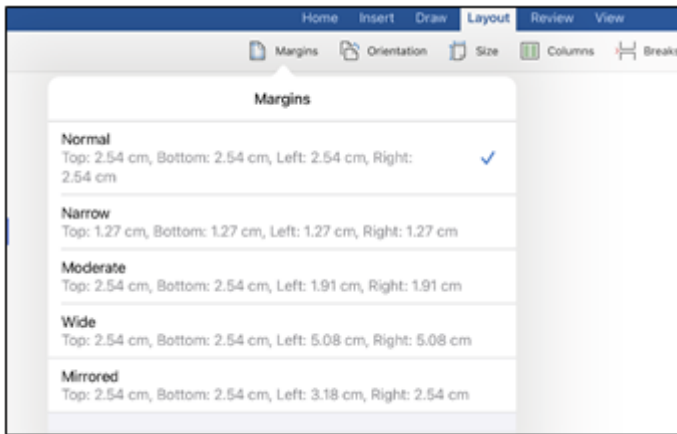
- Navigate by swiping the page up or down.
- To adjust the zoom level just pinch to zoom.

## Page Layout

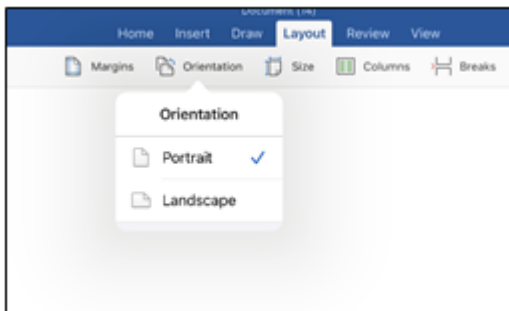
- In order to set the document up, go to Layout on the blue toolbar. The Layout tab is used to make changes to the layout of a page. Within the Layout tab choose one of the options e.g., Margins, Orientation, Size, Columns or Breaks and then scroll down to choose.



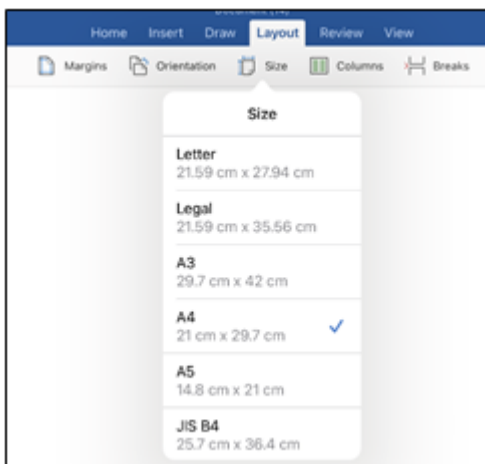
- Choose the margins



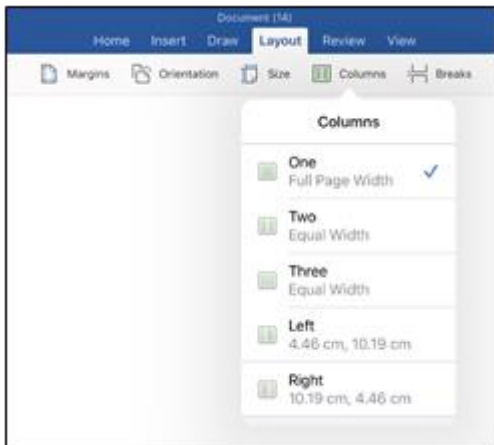
- Choose orientation e.g., portrait or landscape.



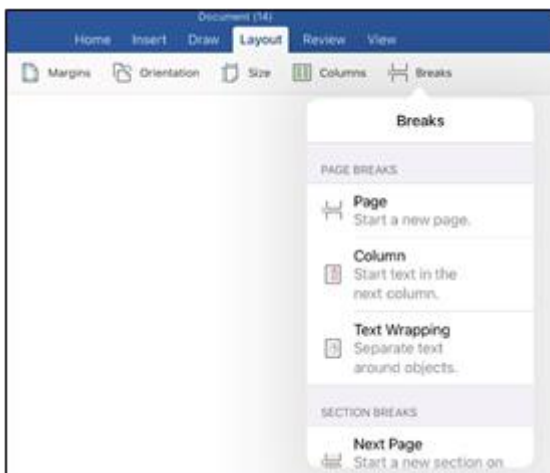
- Choose size e.g. A4, A3 etc



- Choose columns e.g., full page width etc.

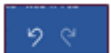


- Choose breaks e.g., page break.



## Enter text

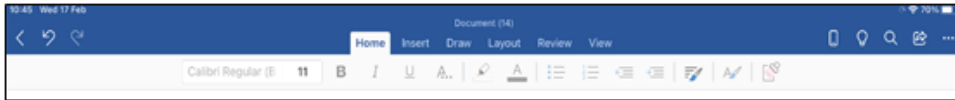
- To enter text just tap on the page and begin typing.
- If you make a mistake or you want to undo your last action, you can tap the Undo button which looks like a curved arrow pointing backwards. It is the second icon from the left on the blue toolbar.
- The Redo button is like a reset button and looks like a curved arrow pointing forwards. It is the third icon from the left on the blue toolbar.
- See diagram below for the Undo and Redo buttons:



- There are more options to Undo and Redo actions which are outlined later in this instruction guide.

## Format text

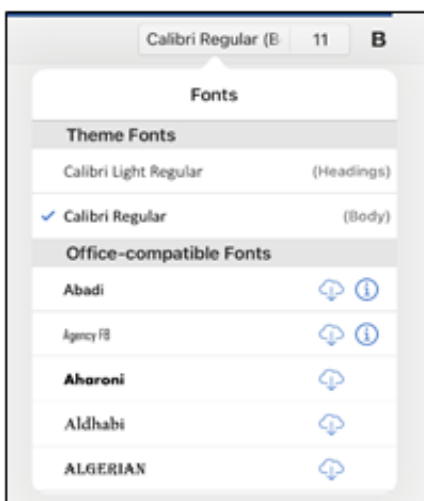
- You will use the Home tab for all text formatting options.



- Select a word or paragraph - double tap on a word to select that word. If you triple tap it will select the paragraph (to unselect tap once anywhere on the screen). Another way to select is double tap on a word and you will see a blue circle on the top left and bottom right of that selection. You can tap, hold and drag the blue circles to make the exact selection you need.



- Change the font - select some text and tap on font name box. Scroll down to choose your font. Office compatible fonts are listed at the top and if you scroll down to the bottom you will find iOS fonts as well.



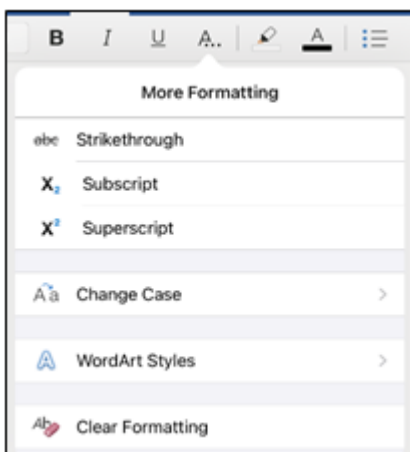
- Change the font size - tap on the number and either scroll down for pre-set font sizes or use the + and – icons to change.



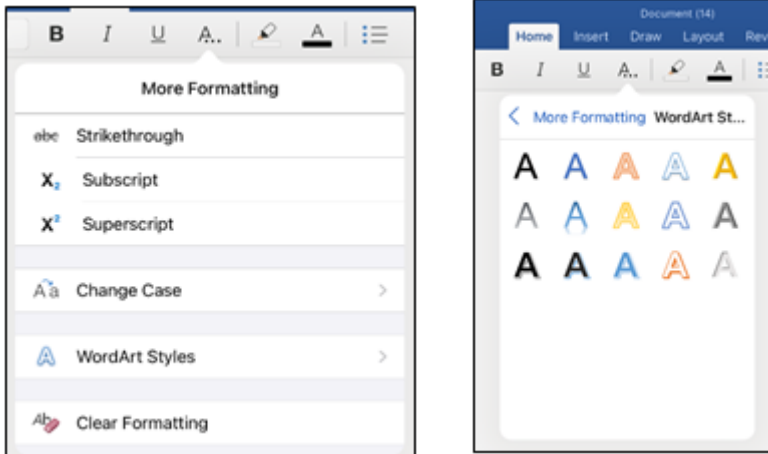
- Add bold, underlining or italics - select some text and then tap the appropriate icon to apply the formatting.



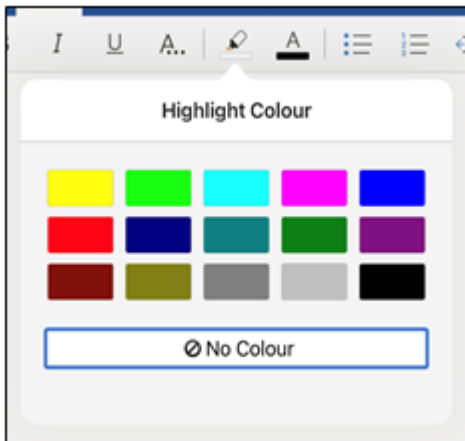
- More formatting options - add formatting such as strikethrough, subscript etc.



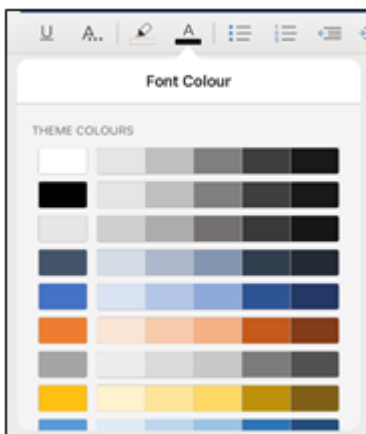
Here you can choose a WordArt style for a title or heading. Select the word/words and then select a WordArt style.



- Highlight text - select some text, tap the highlight icon, and then choose a highlight colour.



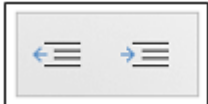
- Change the font colour - tap the font colour icon and then choose a colour.



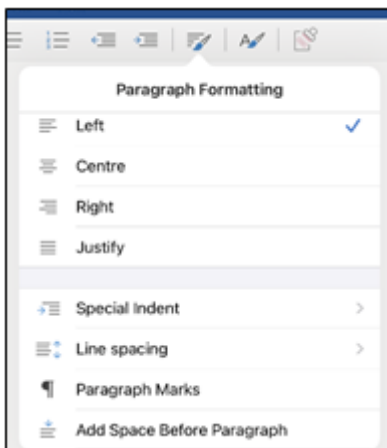
- Add bullet or numbered lists – tap the text and then tap the bullet or the numbered list icon.



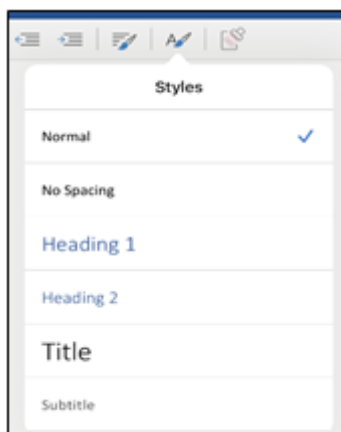
- Indent a paragraph - tap the text, and then tap the indent icon to move the text to the right. Tap the negative indent icon to move the text to the left.



- Paragraph formatting – align text, change line spacing etc.



- Apply a style - to select a text style, tap the style icon, and then select from the list of defined styles. This could be applied to headings.

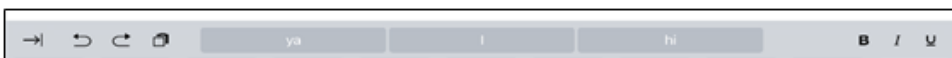


## • Format text with Shortcut bar

- Shortcut bar – this is the strip above the onscreen keyboard.



Some models may have an indent button which is the first button on the left in the diagram below.



- Undo and Redo buttons – this is another option for carrying out the Undo and Redo actions. Tap the Undo button (left button below) to undo typing/ action since the last saved. Tap the Redo button (right button below) to bring back what you have deleted.



- Paste button - place the text cursor where you want to paste and tap the paste button.



- Cut text – select text you want to cut and tap the cut button. This is the scissors icon. The Undo button changes to Scissors when you select text.

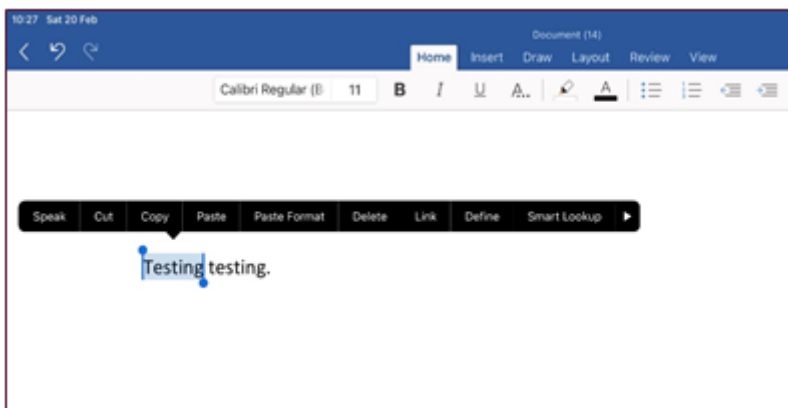


- Copy text – select text you want to copy and tap the copy icon.

- Paste text – place the text cursor where you want to paste (as explained above).
- Predictive text and text correction – three words in the middle of the shortcut bar which will change based on what you are typing.
- Bold, underline or italicise text – These are found on the right-hand side of the strip in the shortcut bar.

### Alternative editing options

- You can cut/copy/paste by selecting a word or paragraph to display editing options above that word or paragraph (in black and white). Then tap on the option required.



- Another way to edit is by using gestures as outlined below:
  - \* Copy, cut and paste  
 Make your selection  
 Pinch with three fingers to copy it  
 Repeat the copy gesture twice to cut it (pinch with three fingers, twice)  
 Reverse the copy gesture to paste (place three fingers on the screen and spread them apart)

- \* Swipe and tap to undo and redo  
Double-tap with three fingers to undo

Swipe left with three fingers to undo

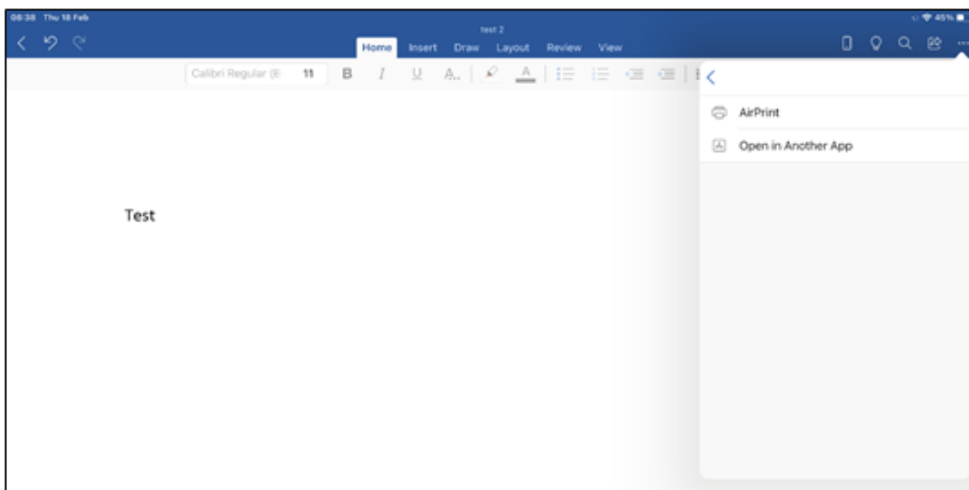
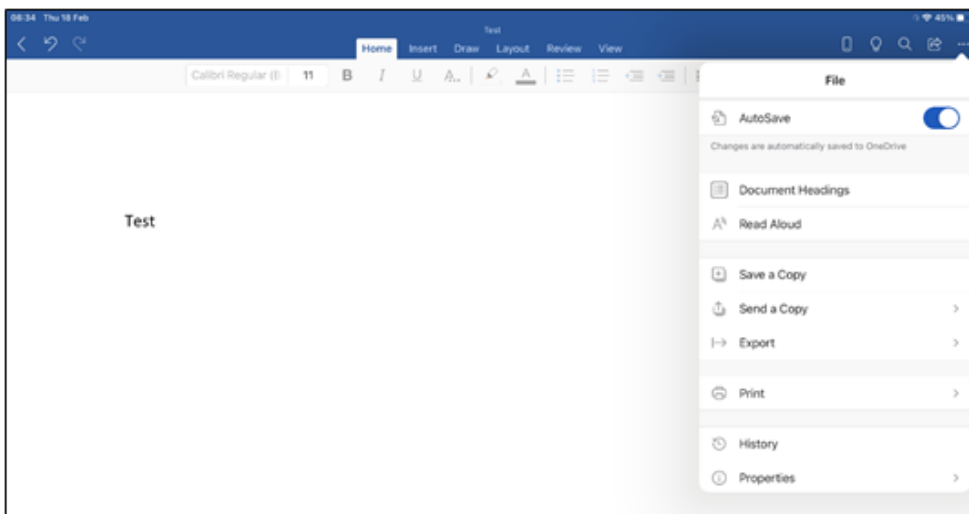
Swipe right with three fingers to redo

- \* Drag to move the cursor

Moving the cursor works the way it always did. But you can now tap and hold the cursor until it gets bigger, and then move it around the screen and drop it wherever you like.

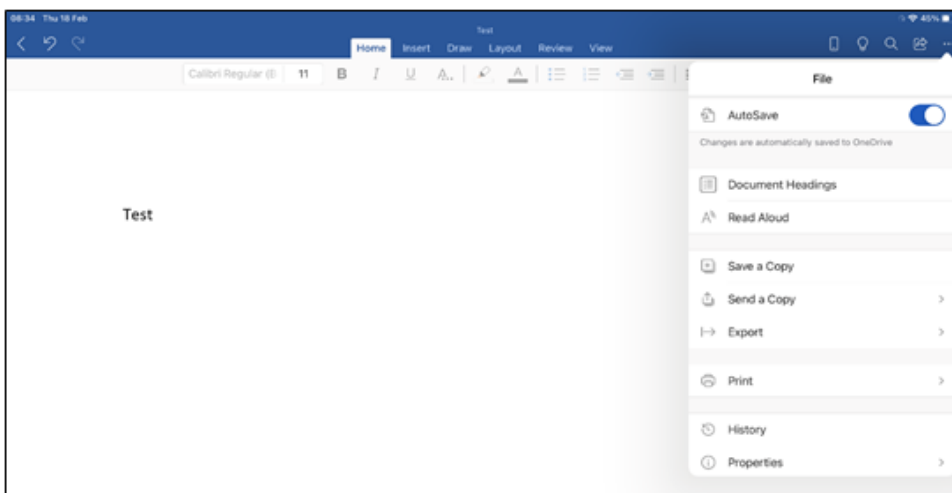
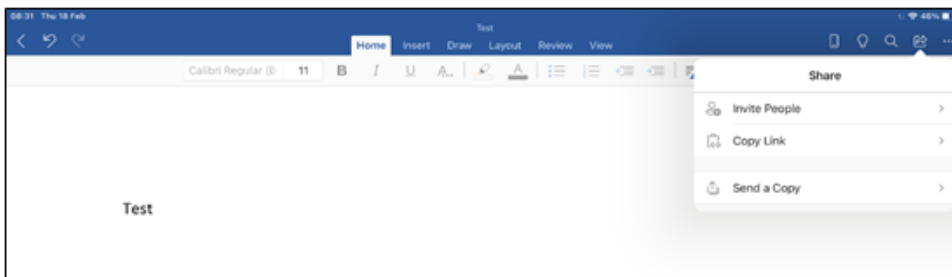
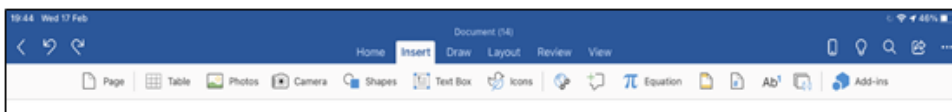
## Print

- You can print the document by clicking on the three dots at the end of the blue toolbar (on the right) and scrolling down to 'Print'.
- From here you can choose whether you are going to use an AirPrint compatible printer or print using an app from the app store which allows you to print to any wireless printer.



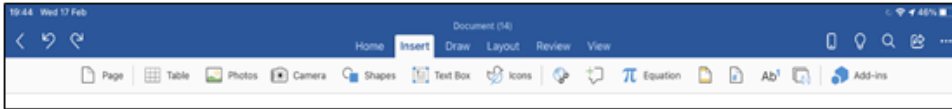
## Sharing and sending options

- The 'Share' icon is in the top right-hand corner on the blue toolbar, next to the three dots (to the left of it). It is an arrow inside a square. This allows you to invite people to edit the document once you have saved it.
- Sharing options can also be found in the icon at the end (three dots), where you also choose your saving options.
- You can send to other people by pressing 'Send a copy'. You can then email with Outlook or send with another app.
- You can export to ODT format or PDF.



## Insert

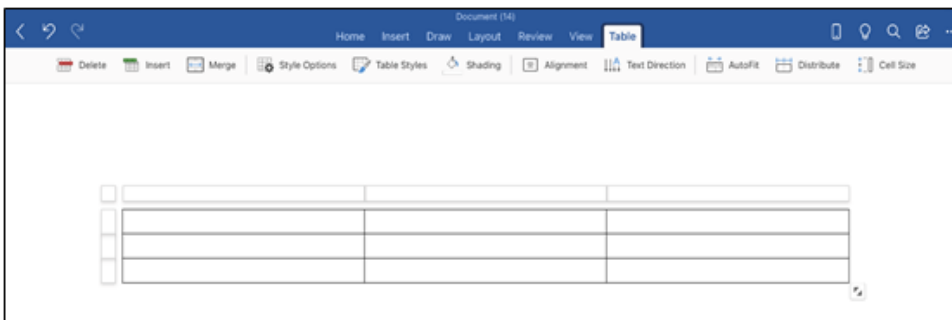
- The Insert tab on the blue toolbar allows you to insert e.g., pages, tables, photos etc.



- Page – You can add a page break at any time by tapping the first icon 'Page' on the Insert tab

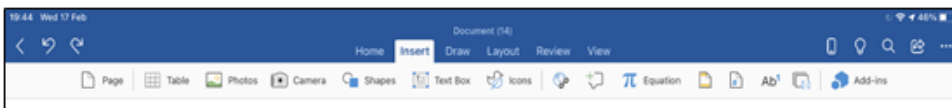
- Table – add a table by tapping the 'Table' icon on the Insert tab.

A new table will appear as shown below. A new tab has also appeared on the blue toolbar which is the 'Table' icon.



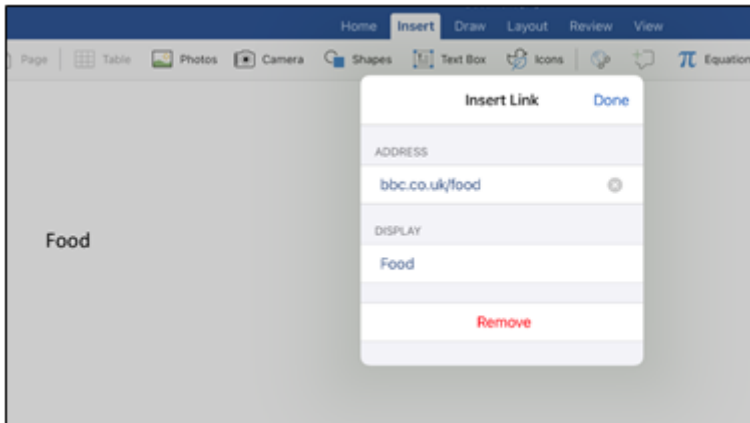
Now you can edit the table by choosing an option e.g., 'Delete' to delete a row, column or table, 'Insert' to add a row or column, 'Merge' to merge or split cells, 'Style Options', 'Shading' etc.

- Photo and Camera – add a photo from your photos or albums. Take a photo with the Camera icon and add to your document. You can then edit this photo as required.

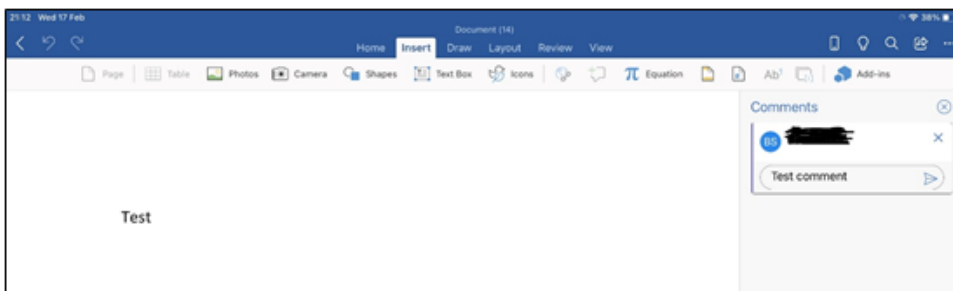


- Shapes, Text Box and Icons- add these from the selection given. Scroll down to select.

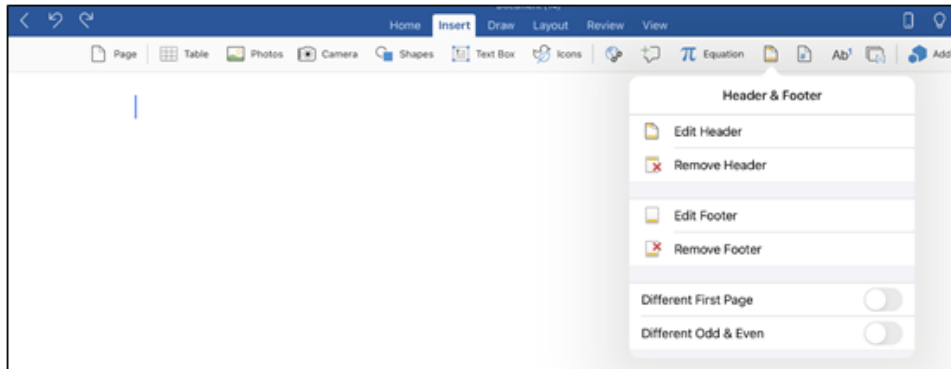
- Hyperlinks – You can insert a hyperlink by choosing the hyperlink icon which is to the right of ‘Icons’. You can also link a word to a website by double tapping the word to select it and choosing the hyperlink icon. You can then add the address of the website you want it to link to and click [Done](#).



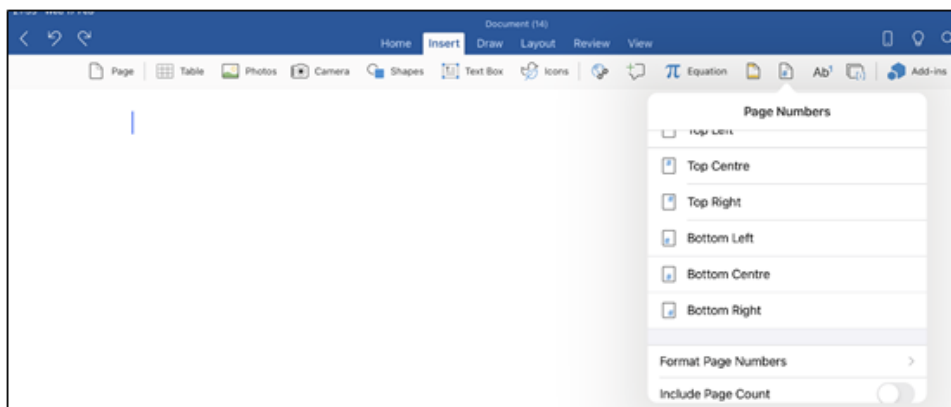
- Comments – choose the ‘Comments’ icon to add a comment. This is next to the hyperlinks icon, on the right of When you add a comment, a comment icon appears on the right-hand side of the page. This is useful when someone else is commenting on your document. You can reply to the comments and this allows you to have a discussion.



- Headers, Footers – Choose and edit headers and footers as required.



- Page Numbers – This allows us to insert a page number. This is next to the 'Header and Footer' icon, on the right. You can choose where you want this on the screen. The 'Format page numbers' allows you to edit the style or choose a letter or a roman numeral. You can also include a page count. If you want to remove page numbers, then scroll down to 'Remove Page Numbers' which is underneath 'Include Page Count'.



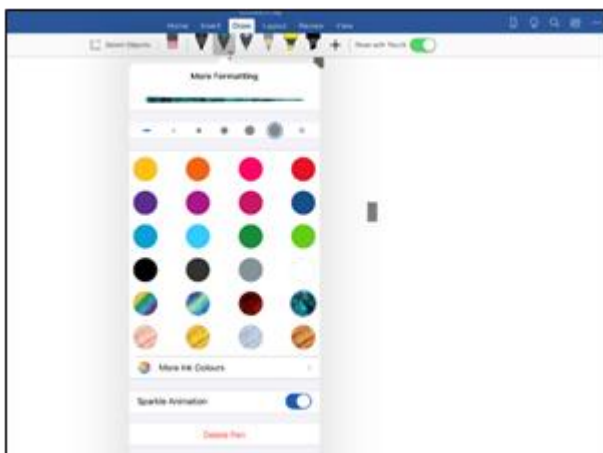
- Footnotes and Endnotes – These are next to the 'Page Numbers' icon on the right. Add footnotes (left icon) and endnotes (right icon) as required.
- Equation – useful for writing scientific or mathematical equations.

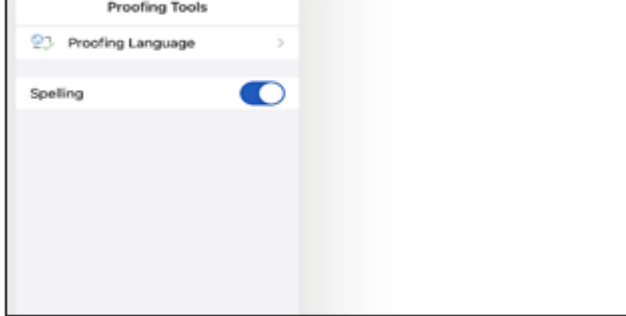
## Draw

- The Draw tab on the blue toolbar allows you to add notes, create shapes, edit text and more.



- If you are using an iPad Pro (either a 12.9" or the new 9.7" version) and if you have an Office 365 account, you can just start drawing. Start drawing on a document using an Apple Pencil and the Word app instantly starts applying digital ink to your document and switches to the Draw tab (see also, instructions on using an Apple Pencil). Draw shapes, objects and annotate documents as required.
- If you want to use your Apple Pencil to select items on the page, you need to select the first option 'Select Objects'. You can then use your Apple Pencil to navigate around the document and make selections.
- If you are reading a document and you want to make a note in the margin, just make the note with the Pencil. If you do not have an Apple pencil, you can draw using touch. Select 'Draw with Touch' as shown above.
- Using the Draw tab, you can switch between an eraser, three pens, a pencil and two highlighters. Once a pen/pencil/highlighter has been selected, you have a few different formatting options including the size of the pen and it's colour. There are also a few different texture-based options to choose from. You can tap the plus or minus sign to make it thicker or thinner.

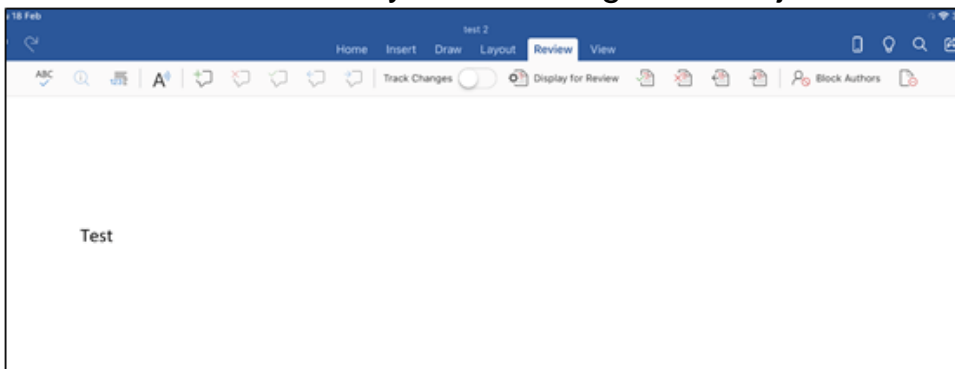




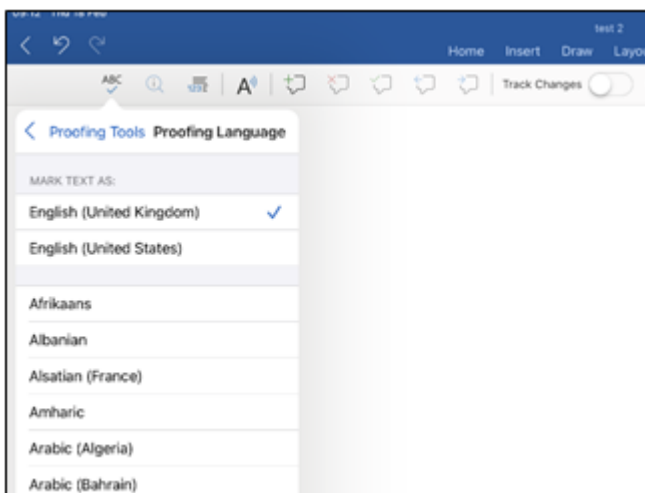
- The + icon is at the end of the pens list. If you tap on this, you can add a pencil, pen or highlighter. This is useful if you frequently need to use different types of pen within one document. Your custom pens icons can be re-arranged. Just tap and hold one of your pens/pencils/highlighters from your list and drag to the desired position.

## Review

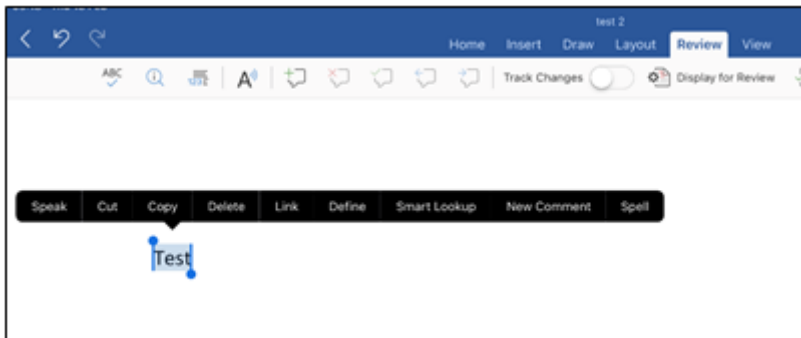
- The Review tab allows you to make general adjustments to the document



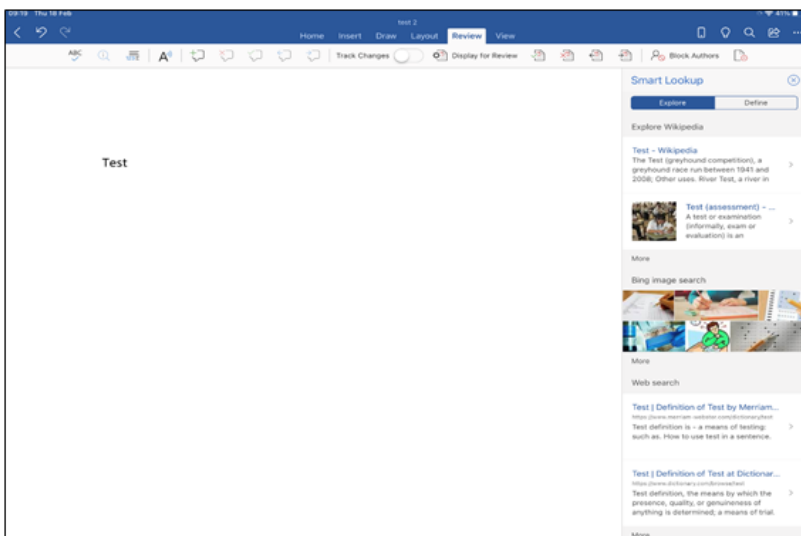
- Proofing tools – this is the first icon which is for spell checking. You can choose a proofing language from the first option. You can also turn off the spellcheck as required.



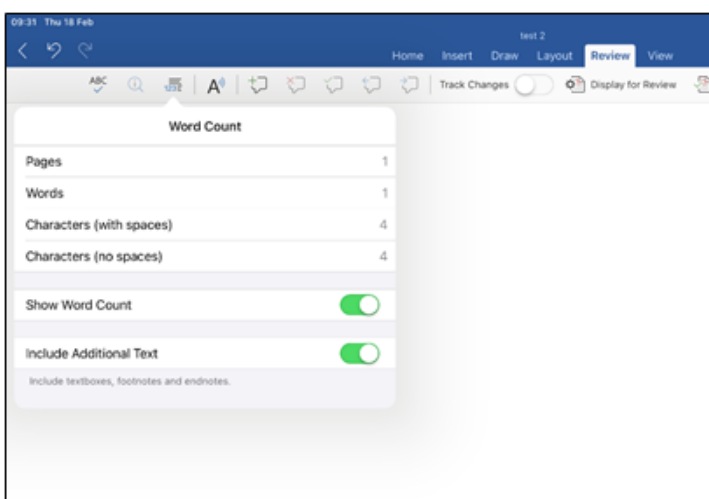
- Smart Lookup – This is the second icon to the right of ‘Proofing Tools’. Select some text and tap on Smart Lookup. This runs a search on Wikipedia and other websites for the word selected.



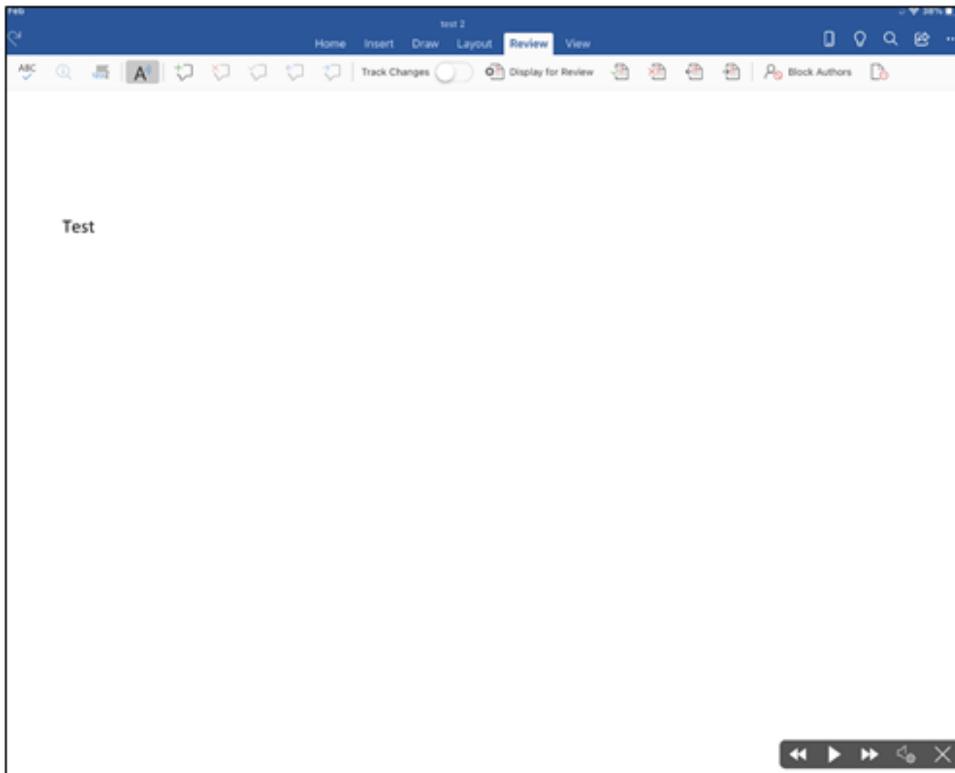
There are two tabs near the top right corner. These are Explore and Define. Define acts as a dictionary.



- Word Count – This is the third icon along. It allows you to view the page count and the word count. You can toggle whether you want the word count to be shown by default. When you scroll through the document the page count and word count will automatically appear at the bottom.

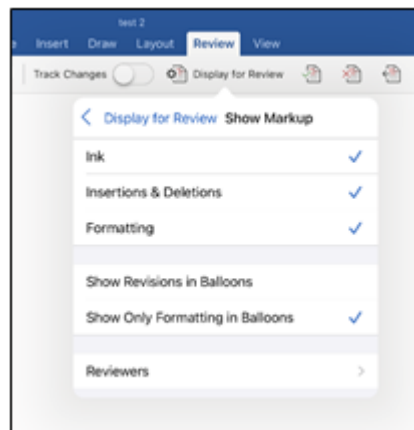
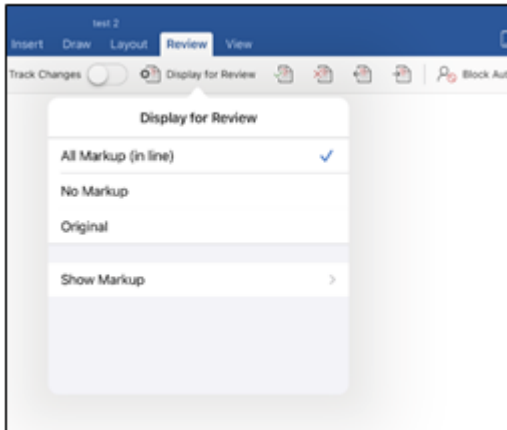


- Read Aloud – This is the fourth icon along (shaded below).

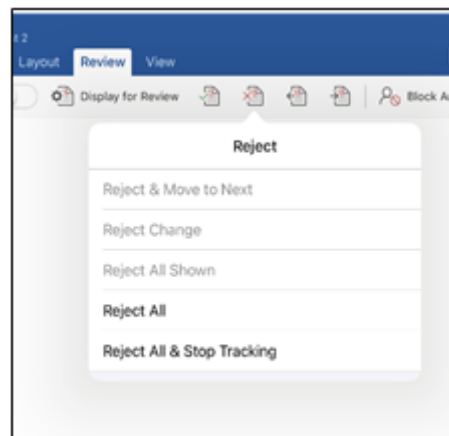
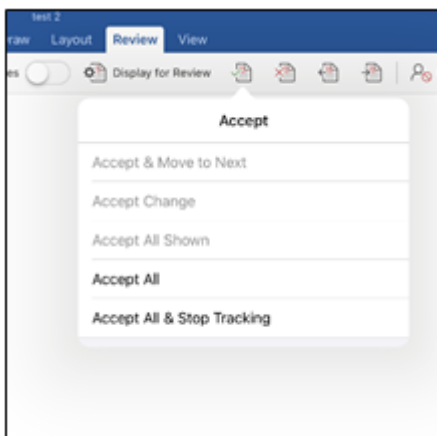


This is available in Office 2019 and Office 365. Select Read Aloud and go to the controls in the bottom right corner. Here you will find Play, Pause and Stop which is the cross. You can also move from one paragraph to another by selecting Previous and Next. The volume can be controlled in the settings icon which has a loudspeaker attached to it.

- Add or remove comments – These are the next few icons after ‘Read Aloud’. If you are working collaboratively or editing a document for somebody else, you can turn on ‘Track Changes’.
- Display for Review – this allows you to change what you see. So, you can see all of the Markup, no Markup or the original. If you select ‘Show Markup’ you can change what elements of the Markup you want to see e.g., insertions or formatting changes.

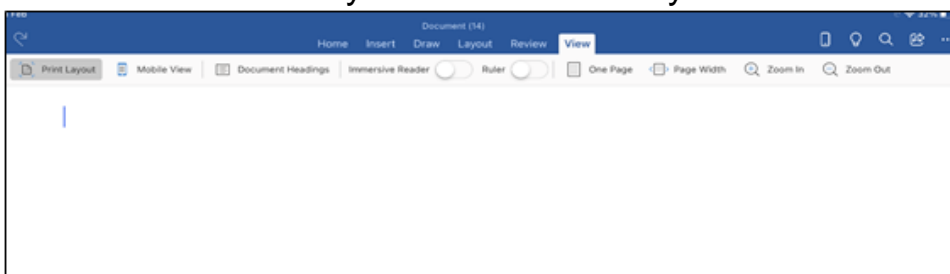


- Once you have received a document that has had changes made, the last few icons after Display Review allow you to approve them or not.



## View

- The View tab allows you to choose how you view the document.

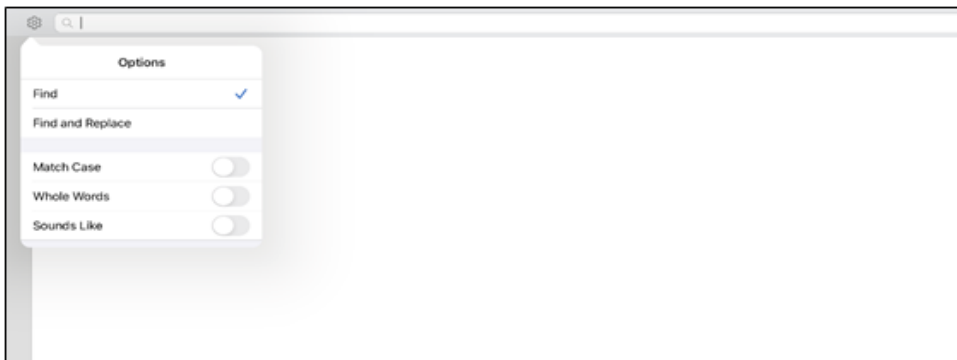


- Find and Replace – in the top right of the blue toolbar, there is a magnifying glass icon. This is the third icon along the bar (in between the 'lightbulb'

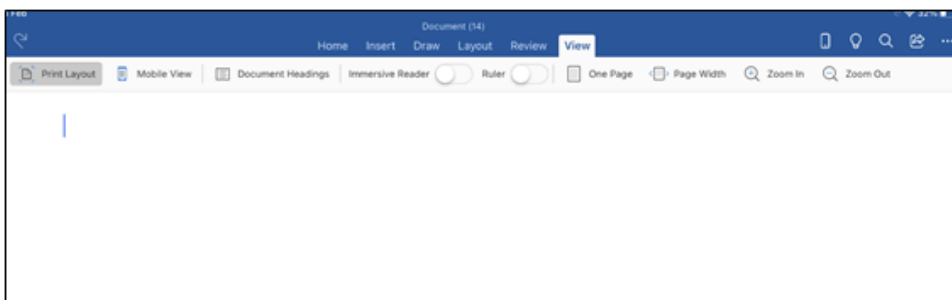
picture and the 'Share' icon). If you tap on this, you can search for text within the document.



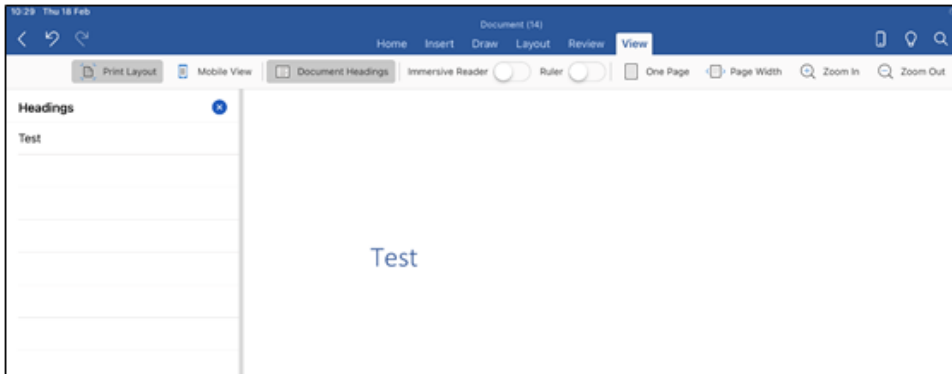
The settings icon to the left of this allows you to find and replace.



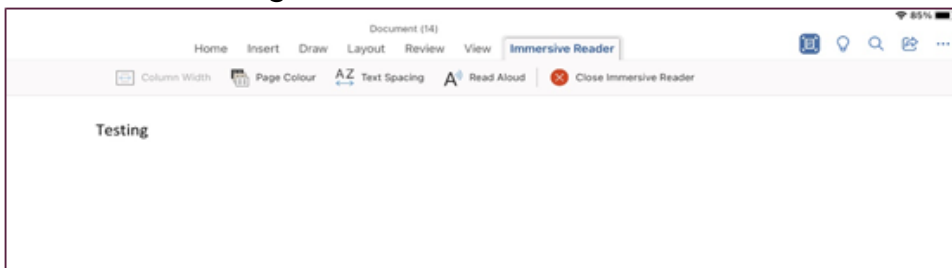
- Print Layout or Mobile View – You can choose between looking at the print layout or the mobile view. You can access the mobile view by either pressing the 'Mobile View' icon underneath the blue toolbar or by tapping on the first icon in the top right corner (next to the lightbulb picture) on the blue toolbar.



- Document Headings – lists document headings once you have applied a headings style.

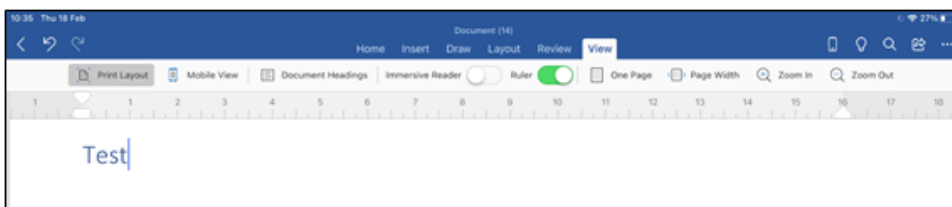


- Immersive Reader – turn on Immersive reader and you will be presented with the following screen.

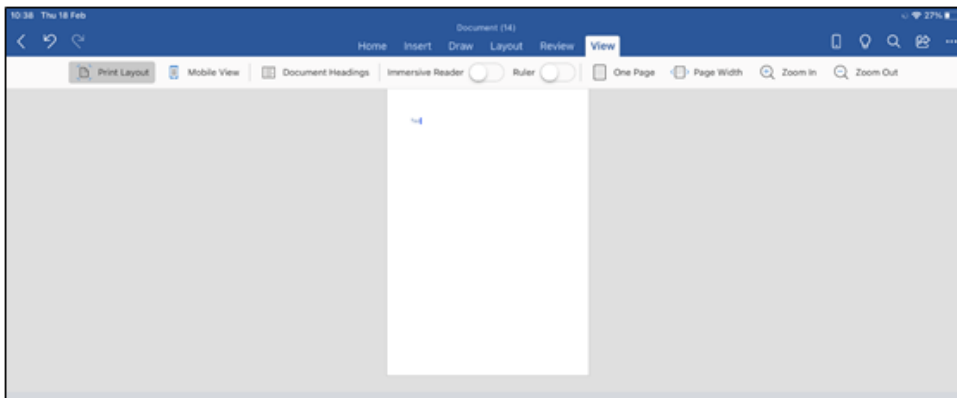


You can now change the page colour, the text spacing or have the document 'Read Aloud' to you (see Review section for 'Read Aloud' instructions). [Immersive Reader is also available in Microsoft Lens \(see Accessing Text – OCR and MS Lens instructions\).](#)

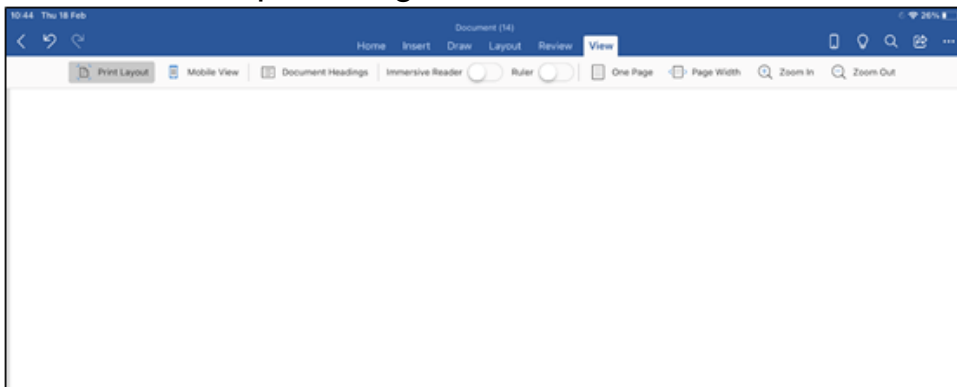
- Ruler – You can choose whether you want to see the ruler displayed at the top.



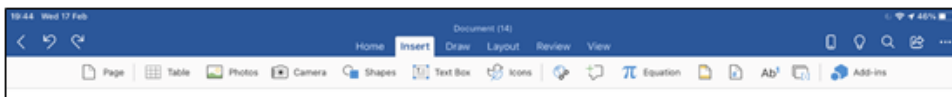
- One Page/Page Width – you can choose whether you want to see an entire page on the screen or fit to width.  
Entire page – tap on ‘One Page’.



Fit to width – tap on ‘Page Width’.

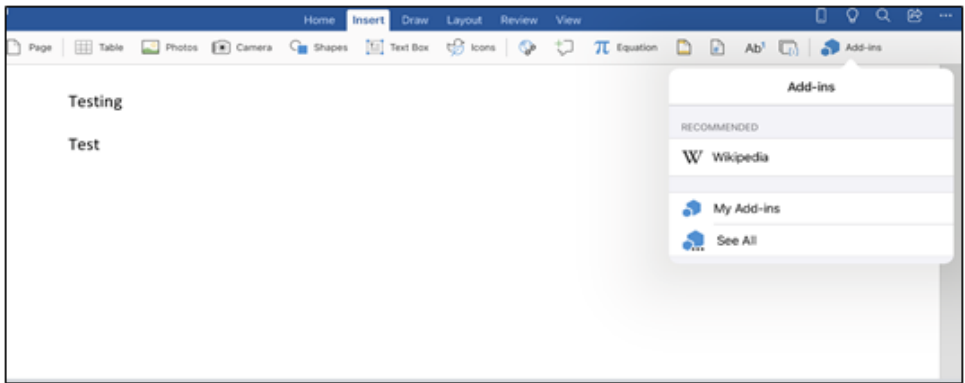


- Zoom in/Zoom Out – zoom in and out on your word document by tapping on the ‘Zoom In’ or ‘Zoom Out’ icons.
- In-built help - the fourth icon in, in the top right corner on the blue toolbar, is a picture of a lightbulb. If you are unsure where to find a particular function, you can type what you want it to do here.





- Add-ins - you can install add-ins into Microsoft Word from a limited selection. Go to the Insert tab and tap on the last icon. You can see which ones you recently installed (My Add-ins) or see all of the available options (See all).



## 5b. Inputting Text

### Outcome

The pupil can increase text to their preferred size within appropriate apps before producing text in a range of word-processing and PDF writer apps.

### Medium-Term Plan

Lesson	Outcome	Key Skills	Key Knowledge	Links to Other Units
Lesson 4: Typing	The pupil can produce mixed sentences by typing digits, letters and symbols which have been increased in size (if appropriate) into word-processing apps.	<ul style="list-style-type: none"> <li>•Type using digits, letters and symbols</li> <li>•Use a word-processing app</li> <li>•Develop speed and accuracy in typing</li> </ul>	<ul style="list-style-type: none"> <li>•How to use a keyboard to record</li> <li>•How to navigate between different keyboards</li> <li>•Which computer font size suits their needs</li> </ul>	
Lesson 5: Completing work in a PDF	The pupil can complete fields of a document in a PDF writer app which they have scanned.	<ul style="list-style-type: none"> <li>•Use scanning apps</li> <li>•Upload scanned images to a PDF writer app</li> <li>•Use a PDF writer app</li> </ul>	<ul style="list-style-type: none"> <li>•Understand the purpose of scanning apps</li> <li>•Understand the purpose of PDF writer apps</li> <li>•How to utilise PDF and scanning apps to complete work more quickly and easily</li> </ul>	Unit 5a, Lesson 2

## Lesson 4: Typing

### Outcome

The pupil can produce mixed sentences by typing digits, letters and symbols which have been increased in size (if appropriate) into word-processing apps.

### Preparation

You will need to ensure a word-processing app is downloaded onto the pupil's iPad.

### Key vocabulary

Type

### Activity

Introduce the Notes app, modelling how to locate the onscreen keyboard. Encourage the pupil to type familiar words with increasing confidence and speed. Extend this to switching between the QWERTY keyboard to symbols in order to record digits and calculations. Discuss when the onscreen keyboard would be a useful tool to use to record work in class, role-playing scenarios when the pupil could use this as an alternative to recording with a pen and paper. Discuss the advantages of using the iPad in landscape (the keyboard is larger). Challenge the pupil to produce mixed sentences using symbols, digits and letters. Once the pupil is confident in using Notes, introduce using the keyboard in a word-processing app i.e. Pages, providing guidance in order to locate the size drop-down menu and increase the font size. Continue to increase confidence and speed in typing words, symbols and digits using the built-in keyboard.

### Tailor It!

- Compare recording by typing using the onscreen keyboard with the use of a 3<sup>rd</sup> party online keyboard.

- Compare recording by typing using the onscreen keyboard with the use of an external keyboard.
- Ensure the expectations match the pupil's current literacy and numeracy skills i.e. you would not expect them to type a divide sign if they don't recognise it or understand the concept of this yet.
- Apply VoiceOver using the onscreen keyboard to locate letter keys.
- Turn VoiceOver on when using an external keyboard so that keys pressed are read out.
- Explore the keyboard options within the Settings menu to tailor the setup i.e. removing predictive text or use a split keyboard.
- Link the pupil's developing typing skills to typing apps specifically designed for pupils with vision impairment i.e. Doorway Online.
- Apply Follow Focus from the Zoom Accessibility menu.
- Ensure that text adjustment within a word-processing app is visually accessible to the pupil or they can apply accessibility options such as Zoom or VoiceOver to adjust these.

### **Let's Apply!**

- Apply developing on-screen typing skills to record using word-processing apps which reflect in-class practise i.e. Word, ensuring that pupil is confident in increasing the font size to meet their individual needs.
- Extend to a range of other apps i.e. Excel.
- Encourage application of typing skills within the classroom and home environment.
- Continue to provide opportunities to develop speed and accuracy in typing.
- In line with Lesson 2, Unit 5, demonstrate how to insert images.

### **Think SMART!**

**S** - Which app do you expect the pupil be able to successfully type in? What do you expect them to have typed? Will they be expected to type letters, words, digits and/or symbols?

**M** – How accurate do you expect the pupil to be? How fast do you expect them to type?

**A** - How much scaffolding does the pupil need to achieve the outcome?

**R** – How confident is the pupil with letter recognition and word-building? Do their typing skills need to be tied into their phonics?

**T** – Will the pupil be confidently able to locate and produce letters, symbols and digits before typing and enlarging text in one lesson or will they need to be gradually introduced?

## Instructions for Lesson 4: Inputting Text Using the Onscreen Keyboard with VoiceOver

VoiceOver changes how you use the onscreen keyboard when you activate an editable text field. You can enter, select, and delete text; change the keyboard language; and more.

### Enter text with the onscreen keyboard

Select a text field, then double-tap to bring up the insertion point and onscreen keyboard.

There are 3 different ways to enter text:

**Standard typing (default):** Select a key on the keyboard by swiping left or right, then double-tap to enter the character. VoiceOver speaks the key when it's selected, and again when the character is entered. Users can also select a random letter on the keyboard and swipe right or left until they get the letter they are looking for; layout is as the onscreen keyboard e.g. swipe to the right to get from E to Y.

**Touch-typing:** Touch a key on the keyboard to select it, then lift your finger to enter the character. If you touch the wrong key, slide your finger to the key you want (VoiceOver will speak the character for each key you touch) but don't take your finger off the screen until you have found the one you want.

**Direct Touch-typing:** VoiceOver is disabled for the keyboard only, so you can type just as you do when VoiceOver is off.

A final option is to use the **dictation option** on the onscreen keyboard, a key that is located to the left of the space bar. VoiceOver users have a useful short-cut to start and stop dictation: a 2-finger double tap on the keyboard. Start dictating when you hear the beep.

### Change typing mode

Select the Typing Mode option on the Rotor, flicking up or down with 1 finger to move between them.

Alternatively, select Settings, then Accessibility, then VoiceOver, then Typing and finally to Typing Style to choose a typing mode.

## **Edit text with the onscreen keyboard**

### **To move the insertion point**

Use the rotor to choose whether to move by character, word or line, and the swipe up or down to move forward or backward in the text. VoiceOver makes a sound when the insertion point moves, and speaks the character, word, or line that the insertion point moves across.

Double-tap the text to move to the beginning or the end.

### **To delete a character**

Use the backspace key on the onscreen keyboard.

### **To select text**

With Text Selection enabled within the Rotor menu, set the rotor to Text Selection, swipe up or down to choose Character, Word, Line, or Sentence, then swipe left or right to move backward or forward.

Alternatively, set the rotor to Edit, swipe up or down to choose Select or Select All, then double-tap. If you choose Select, the word closest to the insertion point is selected when you double-tap. To increase or decrease the selection, do a two-finger scrub (quick move 2 fingers to make a 'z' shape) to dismiss the pop-up menu, then zoom out or pinch in to make the selection larger or smaller.

### **Cut, copy, or paste**

Set the rotor to Edit, select the text, swipe up or down to choose Cut, Copy, or Paste, then double-tap.

### **Fix typos**

Set the rotor to Misspelled Words, then swipe up or down to jump to the previous or next misspelled word. Swipe left or right to choose a suggested replacement, then double-tap to use the replacement.

### **Undo**

Shake iPad, swipe left or right to choose the action to undo, then double-tap.

### **Change the keyboard settings**

Keyboard settings can be changed by:

- select Settings
- select Accessibility
- select VoiceOver
- select Typing

Options include:

**Phonetic Feedback:** you can choose to have text spoken character by character, or even character followed by its phonetic equivalent—for example, B and then Bravo.

**Typing Feedback:** Choose to speak characters, words, both, or nothing.

**Rotor:** Select the settings you want to include in the rotor.

**Verbosity:** Tap Deleting Text. To have VoiceOver speak deleted characters in a lower pitch, tap Change Pitch.

## Inputting text using Braille Screen Input

If you turn on Braille Screen Input, you can use your fingers to enter six-dot braille or contracted braille directly on the iPad screen, without a physical braille keyboard.

### Setting up Braille Screen Input

Add Braille Screen Input to the rotor menu by doing the following:

- Select Settings
- Select Accessibility
- Select VoiceOver
- Select Rotor
- Select Braille Screen Input to select it from the list.

### Turning Braille Screen Input ON and OFF

Use the Rotor to go to Braille Screen Input

Each time, it will give you two options for holding the iPad when inputting Braille:

**Tabletop mode:** in this, the iPad sits flat on the table in front of you, and your fingers sit on the screen in the usual 6-key format.

**Screen-away mode:** holding the iPad up in front of you, turn it around so that the right side is on the left side and the back of the iPad is facing you. Your fingers will then sit vertically each side of the iPad with dot 1 at top left and dot 6 at bottom right.

Enter braille characters by tapping the screen with one or more fingers at the same time. As you tap, hold and then release the dots, iPad will read your letters.

Tip: To have iPad read dots aloud, tap and hold the dots, then when you hear the timer tones and announcement, release the dots.

If the dots are not in your natural finger positions, double-tap each dot in turn to ‘reset’ their position.

To exit Braille Screen Input, do a two-finger scrub (move two fingers back and forth three times quickly, making a “z”), or adjust the rotor to another setting.

## Supplementing iPad Keyboard Braille with gestures

Keyboard Braille entry on the iPad does not imitate all aspects of a Braille keyboard, and you will need to supplement your Braille with a number of gestures which will be spoken by VoiceOver. The most common are here:

Action	Gesture
Enter a space	Swipe right with 1 finger; in screen away mode, swipe to your right
Delete the previous character	Swipe left with 1 finger
Move to a new line	Swipe right with 2 fingers
Cycle through spelling suggestions	Swipe up or down with 1 finger
Enter a carriage return, or send a message (in Messages)	Swipe up with 3 fingers
Switch between six-dot braille and contracted braille	Swipe right with 3 fingers
Turn braille contractions on or off	Swipe right with 3 fingers
Translate immediately (when contractions are enabled)	Swipe down with 2 fingers
Switch to the next keyboard	Swipe up with 2 fingers

## Change Braille Screen Input settings

This can be done at the Braille Screen Input menu.


- Select on Settings
- Select Accessibility
- Select VoiceOver
- Select Braille
- Select Braille Screen Input

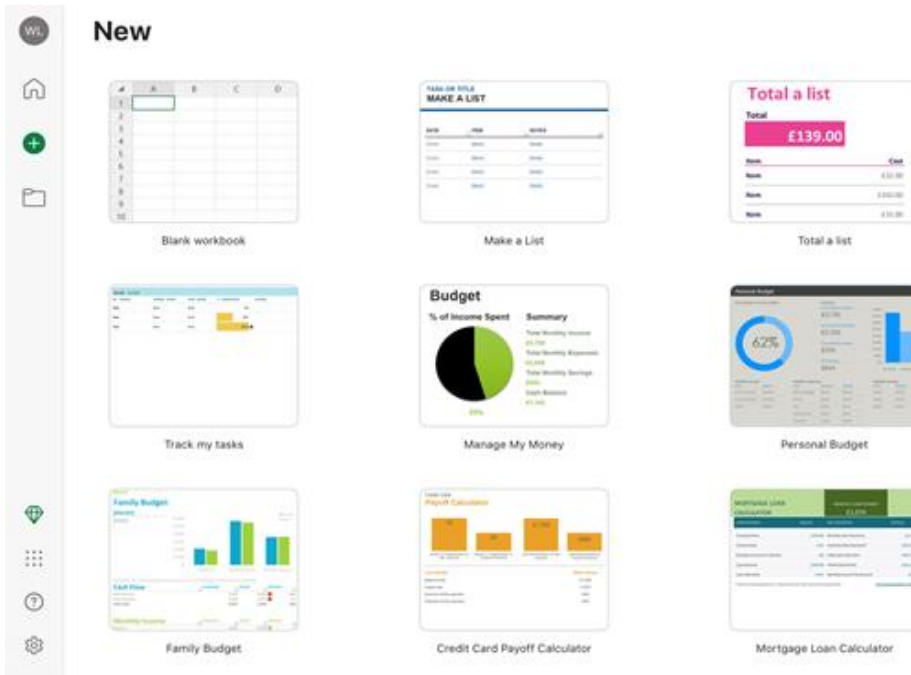
The following options are available:

- uncontracted 6-dot Braille
- uncontracted 8-dot Braille
- contracted Braille
- reverse dot positions, which swaps dots 1 and 3 with dots 4 and 6 in both 6- and 8-dot Braille.

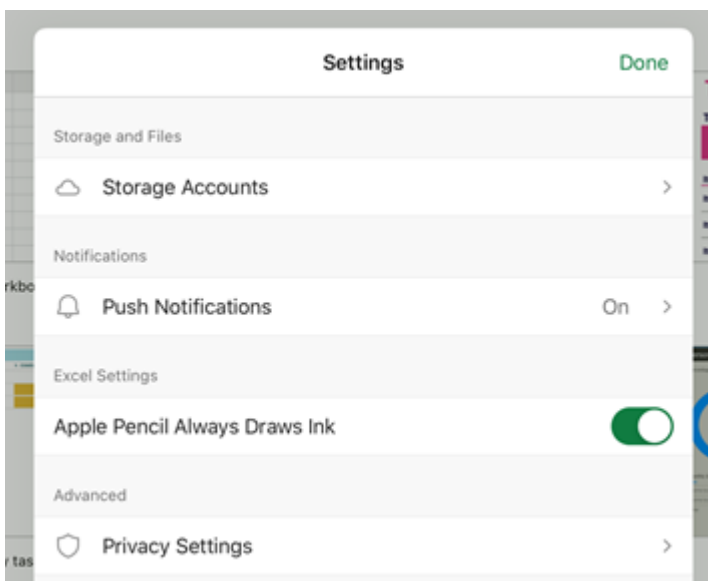
# Instructions for Lesson 4: Using the Microsoft Excel App

## App Settings

1. From home screen menu tap cog icon  (bottom left)



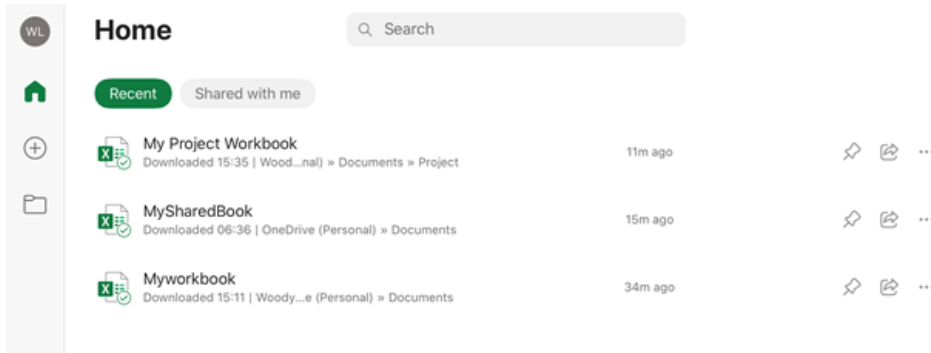
2. Choose a setting to change from the settings pop up menu



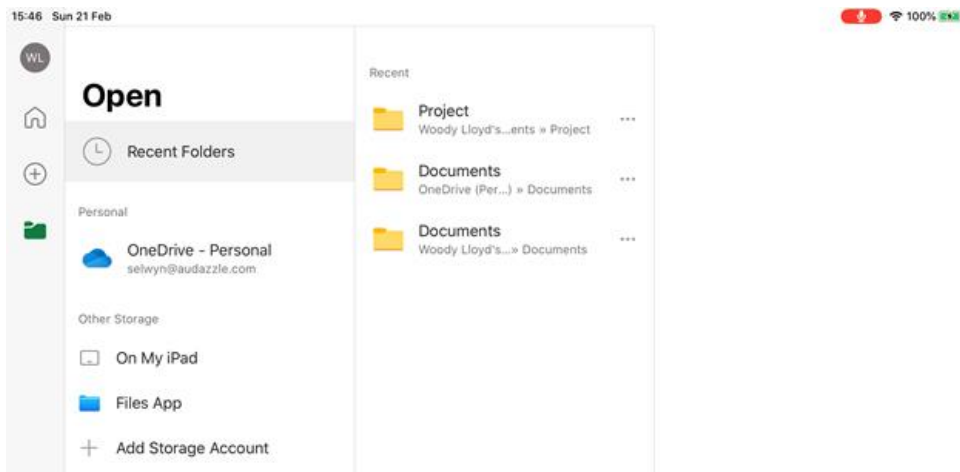
## Open a saved file (workbook)

### Opening an existing file from the Excel App Home screen

#### 1. Option A - Choose Recent

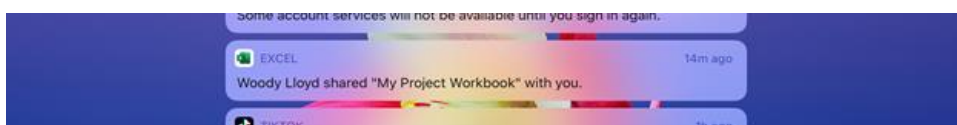


#### 2. Option B - Tap folder icon and navigate through folders to find the existing file

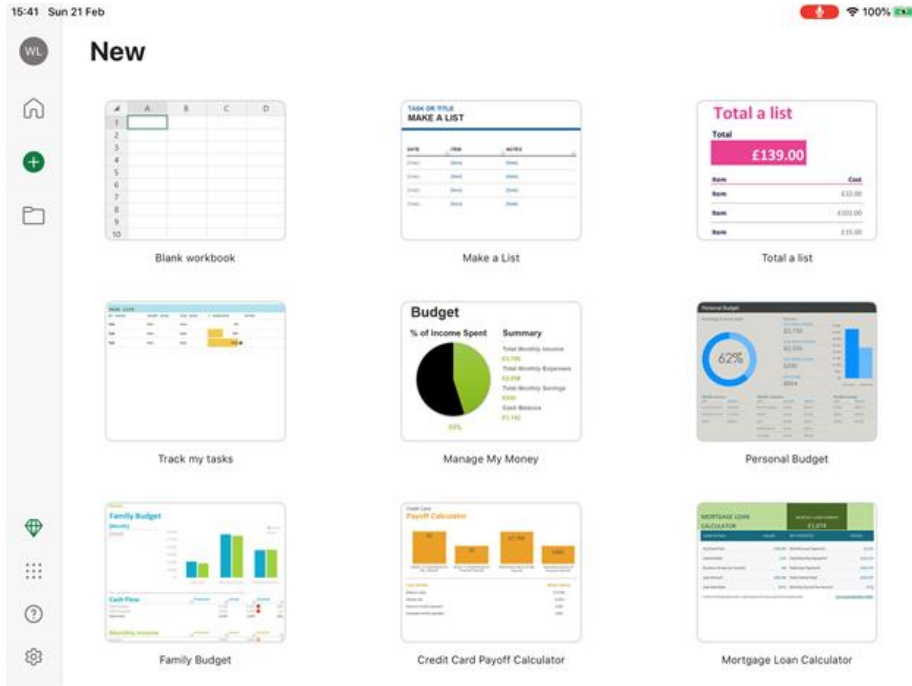


## Open a file someone shared with you

File shares can arrive by email or as pop up notifications on your iPad. When you tap on the link in your notification or your email it will open the excel app and the shared document.



## Open a new file from a template




1. Tap the + icon (this is a plus sign in a circle)
2. The screen presents a wide range of templates to choose from
3. Tap the one you want to use

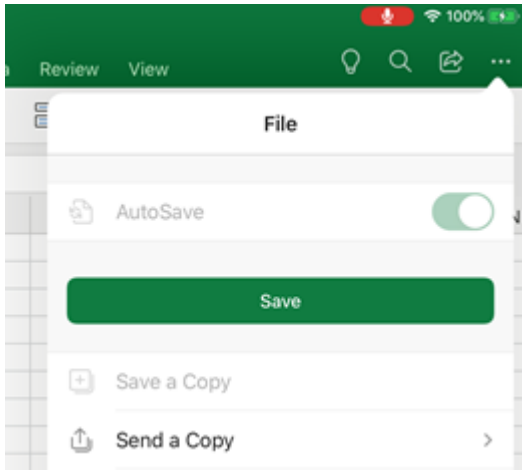
## Open a blank/new workbook

1. Tap the + icon (this is a plus sign in a circle)
2. The screen presents a wide range of templates to choose from
3. Tap the top left thumbnail which should be called **Blank workbook**

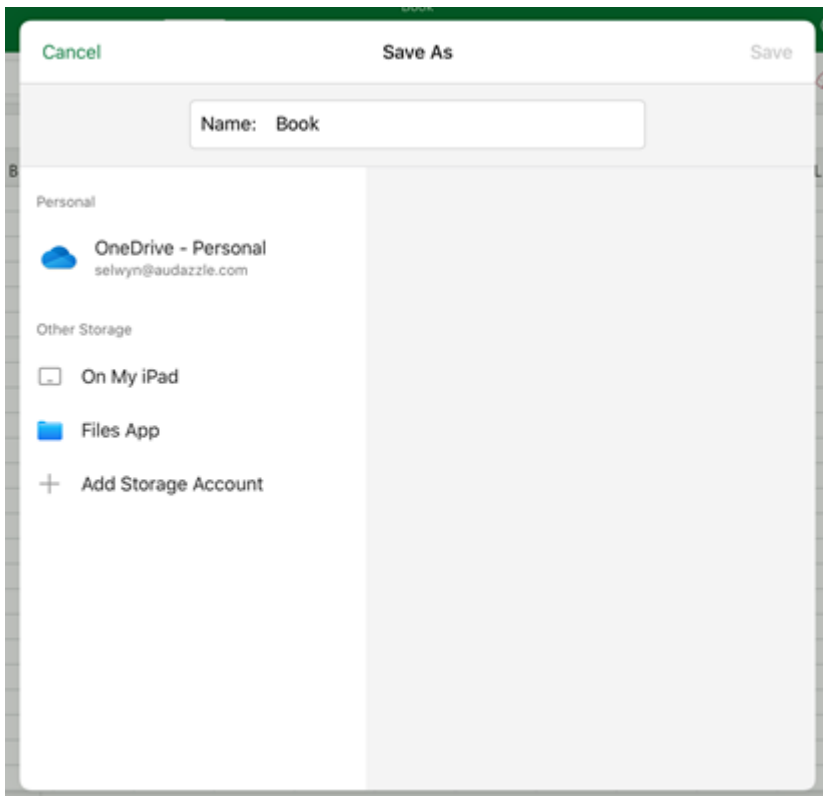
## Save a workbook

1. While your document is open, tap the ellipsis icon (three dots) on the top right-hand corner of the excel top bar menu 

2. Tap the save button



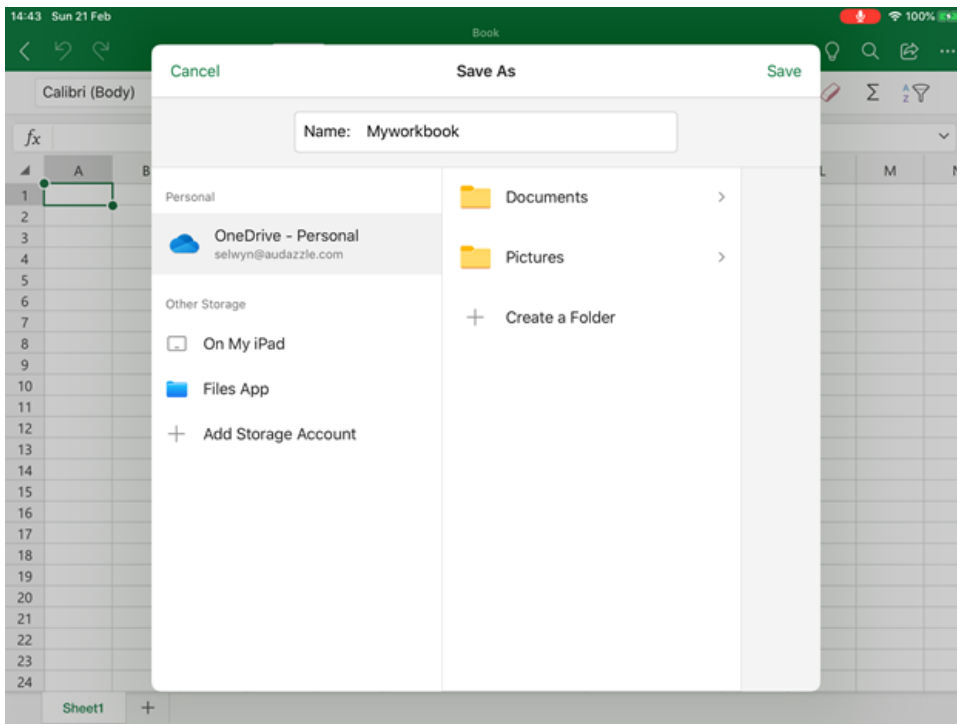
3. Name your file e.g. "Myworkbook"



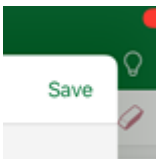
4. Close the keyboard by tapping the bottom keyboard icon on the keyboard pad



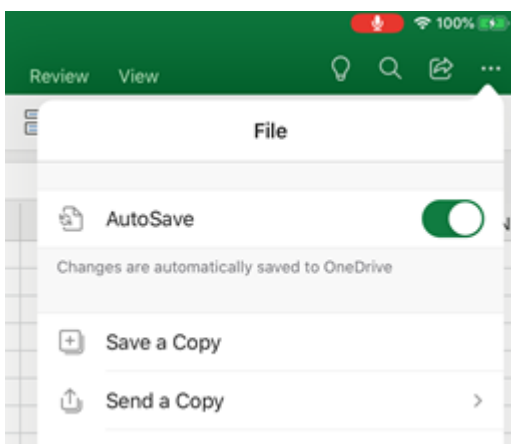
## 5. Select where to save, e.g. My Documents



## 6. Tap the word 'save' top right of the pop up window




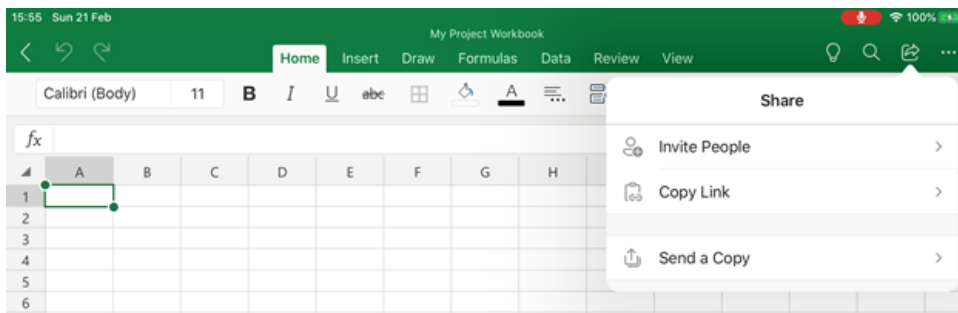
## 7. "auto-save" is now on by default for new documents, repeat the first step (tap the ellipsis dots icon to check this)




## Sharing workbooks

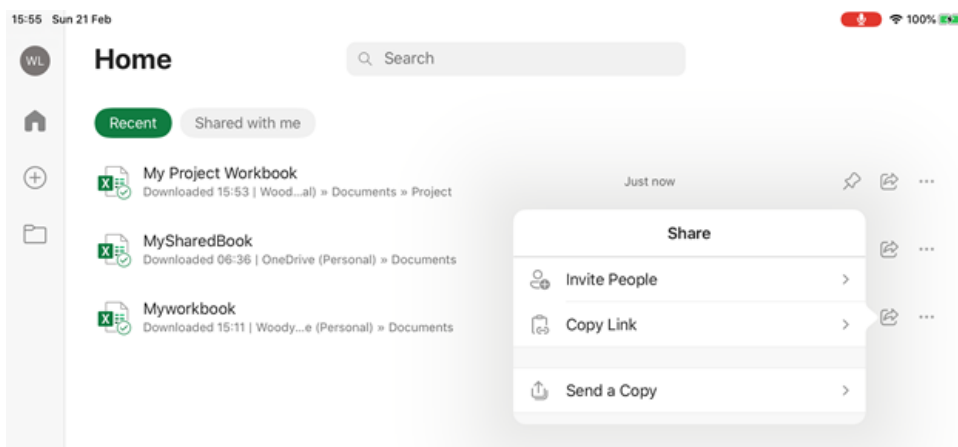
### Share while working in the workbook/sheet

1. From top menu on the right, tap the share icon (box like share with an arrow) 
2. You then have the options to “Invite People”, “Copy Link” to paste in another message or to “Send a Copy”
3. You will need the email address of where/who you would like to share with.

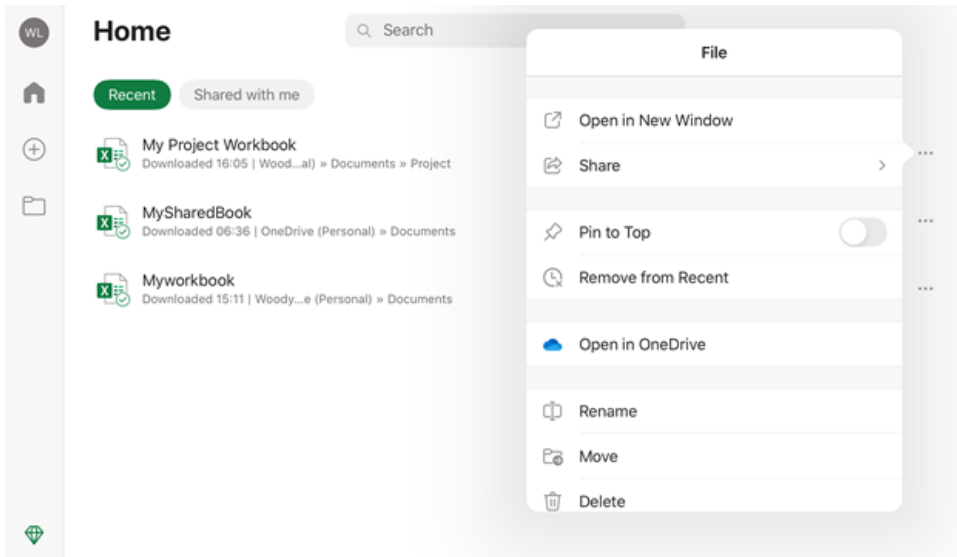



### Share a workbook from a folder or list of files

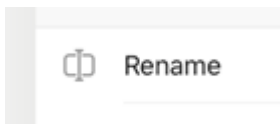
1. In a folder or list view each file has icons on the right hand side of the list
2. Tap the share icon (box like share with an arrow) 
3. You then have the options to “Invite People”, “Copy Link” to paste in another message or to “Send a Copy”



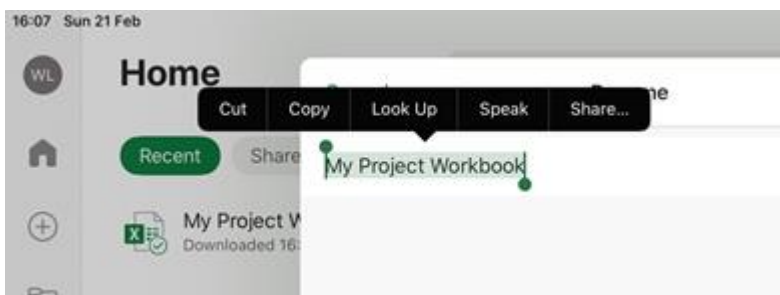
## Rename a file



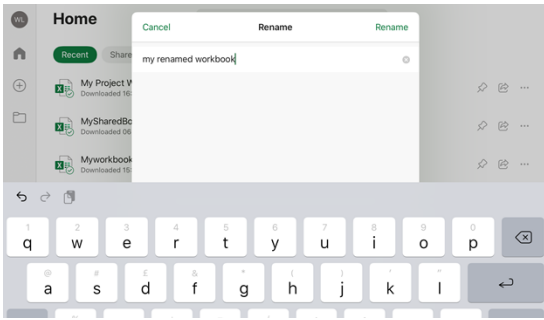
1. From a list of files (such as Recent or a folder view) tap the ellipsis (three dots icon) 
2. Tap rename



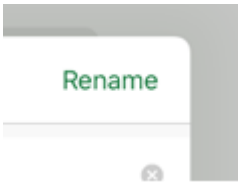
3. Select the name of the file in the pop up screen



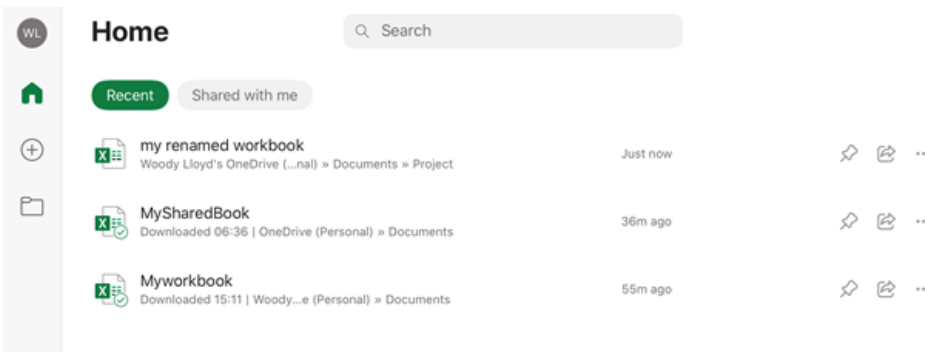
4. Rename using the keypad



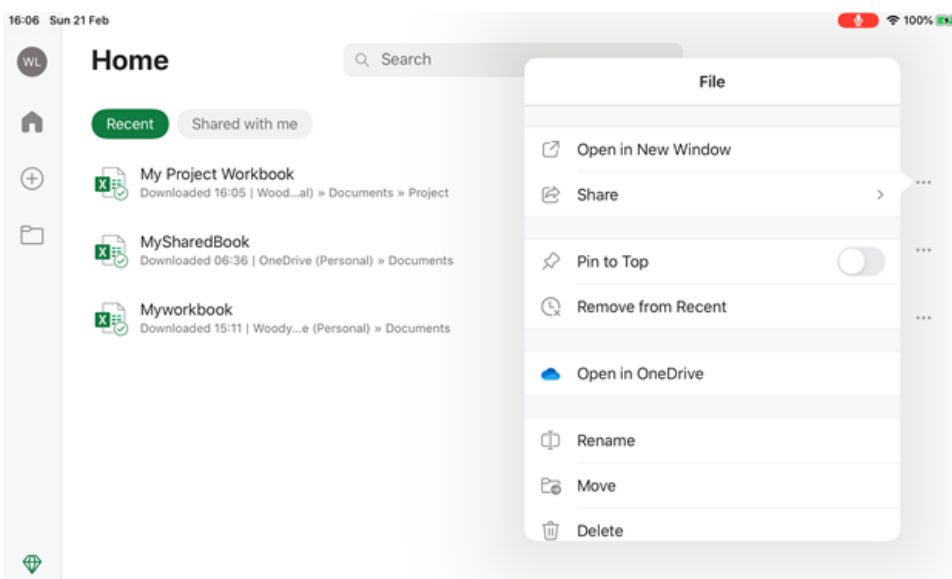
5. Tap the word Rename to finish (top right corner or pop up)



6. View renamed file in the original list of files

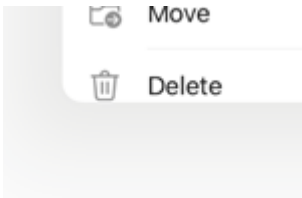


## Delete a file

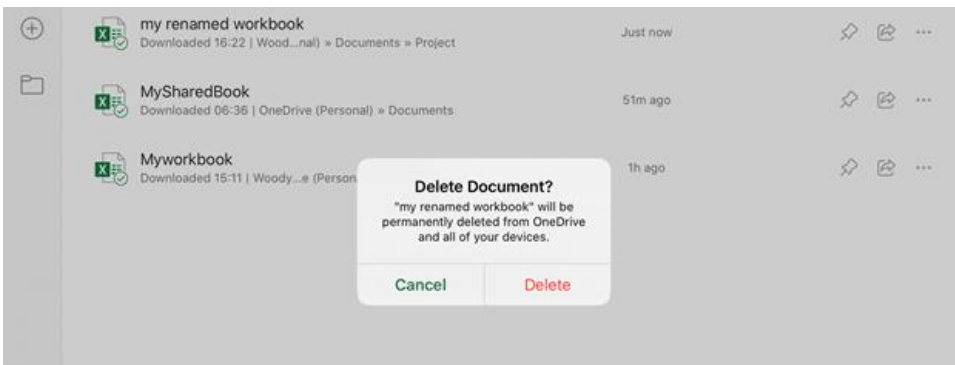


1. From a list of files (such as Recent or a folder view) tap the ellipsis (three dots icon) on the same row as the file you want to delete

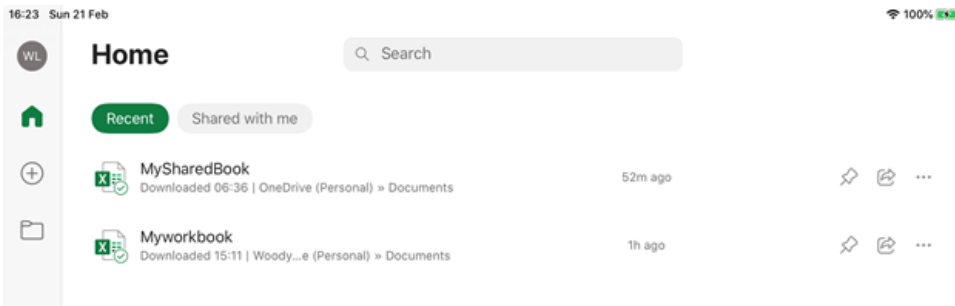
2. Tap delete



3. From the confirmation pop up tap delete again

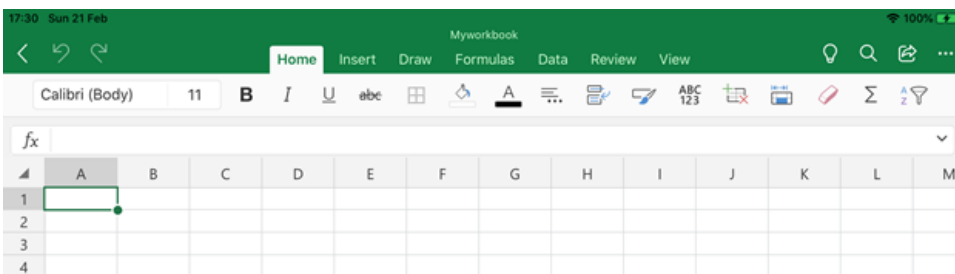


4. View the list with the file now gone

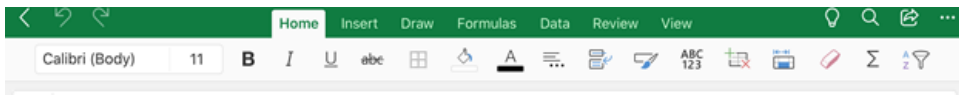


## Interfaces/menus

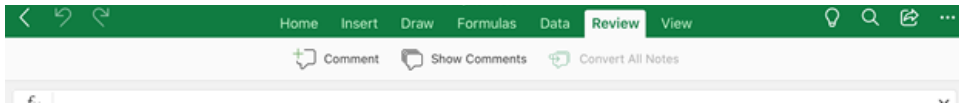
### Main menu and Top Bars



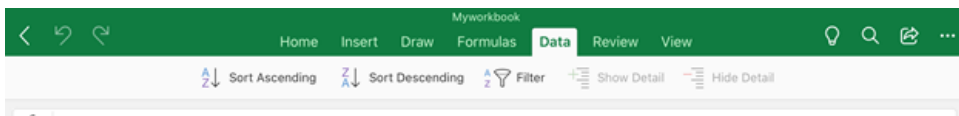
## View Bar



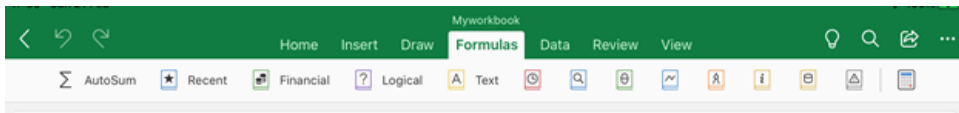
## Review Bar



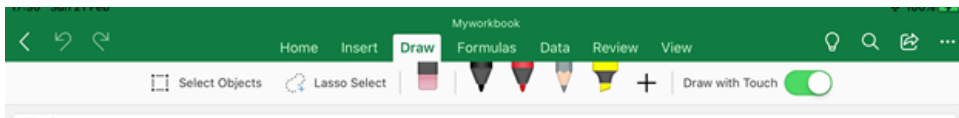
## Data Bar



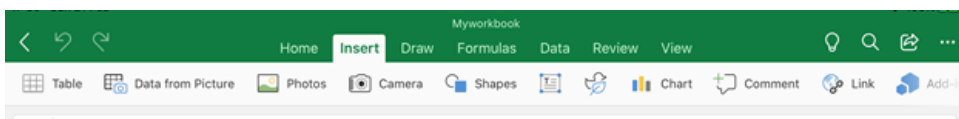
## Formulas Bar



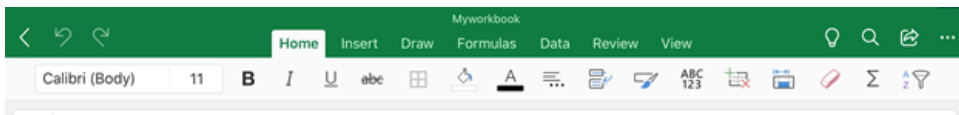
## Draw Bar



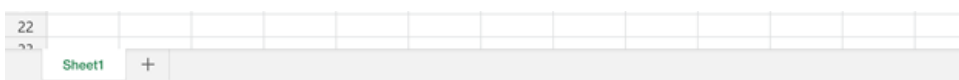
## Insert Bar



## Home Bar



## Sheet Tabs via Bottom Bar



## Add new sheet

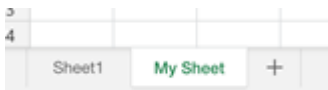
1. From the Sheets Tab Bar (bottom of screen)
2. Tap the + symbol on the rightmost side of the Sheets Tab Bar at the bottom of the screen



3. Optionally name your new sheet



4. The new sheet is now successfully added to the Sheets Tab Bar



## Moving Sheets

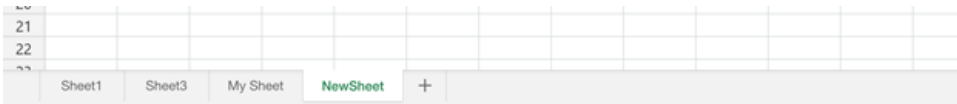


1. Tap and hold (i.e. long tap) the sheet tab name you wish to move at the Sheets Tab Bar at the bottom of the screen.



2. Tap Move from the menu which pops over the Tab Bar

3. From the move menu, tap where you want to move the selected sheet. In this example we select to (move to end) .



## Duplicate Sheets

1. Tap and hold (i.e. long tap) the sheet tab to move at the Sheets Tab Bar at the bottom of the screen



2. Select **Duplicate** from the menu which pops over the Tab Bar

3. Check the duplicate sheet is now successfully added to the Sheets Tab Bar



Excel has called in Sheet1(2). This means the sheet is a second copy. Duplicating a sheet will make a copy of all data and formula.

## Print

1. From the top bar tap the ellipsis (three dots) on the right side of the screen



2. From the drop down menu Select Print



3. Choose the printer option you recognize. You can choose whether you are going to use an AirPrint compatible printer or print using an app from the app store which allows you to print to any wireless printer.

## Data Entry

1. Select cells by tapping on the cell you want to use.
2. Choose edit from the inline menu
3. Key in data using the keypad

## Undo/Redo

1. From the KeyPad




2. From the Top Bar

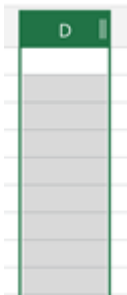


3. To Undo tap the Back Arrow and
4. To Redo tap the forward arrow.

## Resizing Rows and Columns

Resize a column (visually)

1. Tap on the column letter until a double vertical line icon  appears



2. Tap and hold while moving this icon will increase or decrease the column width

Resize a row (visually)

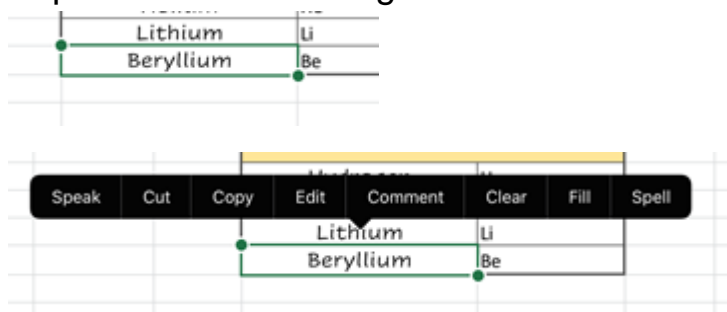




1. Tap on the row number until a double horizontal line icon appears
2. Tap and hold the double lines icon while sliding your finger down or up will increase or decrease the row height

## Context Menu

Tap and hold a cell to get the context menu

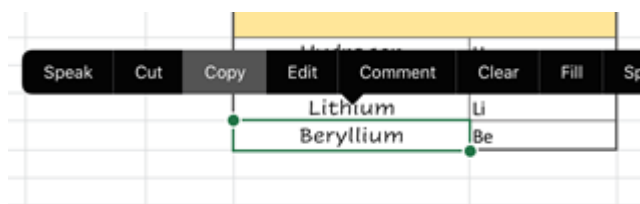


## Cut

1. Tap and hold a cell to get the context menu
2. Tap cut. This removes the contents of the cell and at the same time copies the contents to memory (known as the pasteboard).

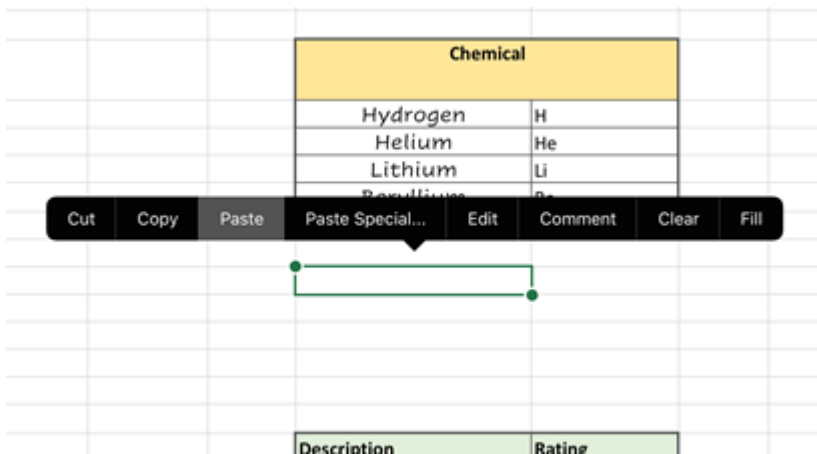
## Copy

1. Tap and hold a cell (or range of cells) to get the context menu
2. Tap copy which copies the contents of the cell(s) to memory (known as the pasteboard)

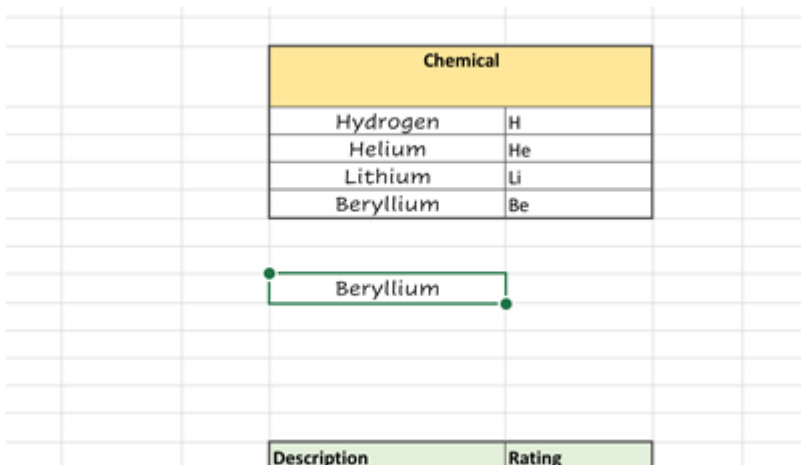


## Paste

1. Tap and hold a cell to get the context menu



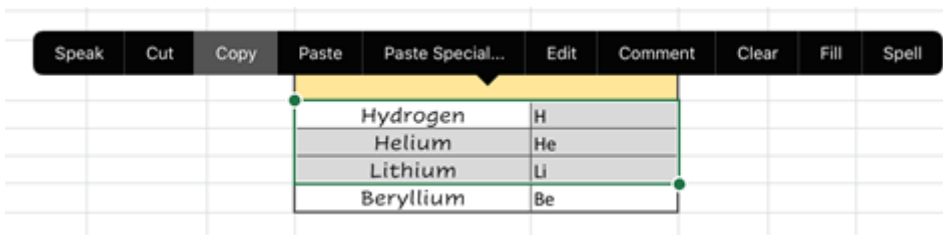
2. Tap paste to insert the copied content from memory (the pasteboard)



## Pasting a Copy of One or More Cells

Tip: Make sure the worksheet has enough clear space to hold the data you want to copy

1. Select the range of cells you wish to make a copy of



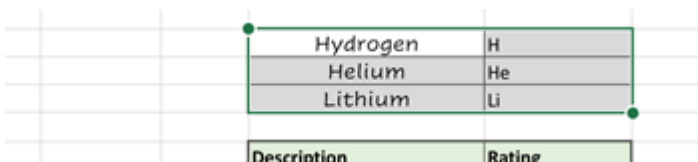
2. Select a start cell with enough space below and to the right to hold the copied data

3. Hold and tap the cell until the context menu appears

4. Tap paste



5. The result is a copy of your data in another part of your workbook or worksheet

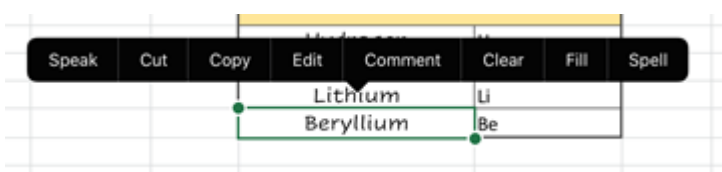


6. Excel will copy everything (styles, content and formula) when you simple use "Paste"

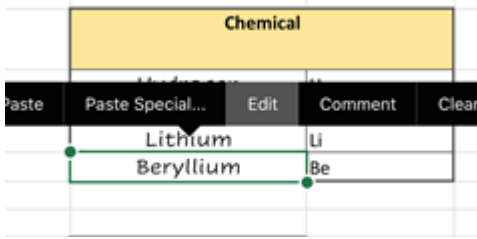
7. Use "Paste Special..."  to decide or limit what gets pasted

## Edit

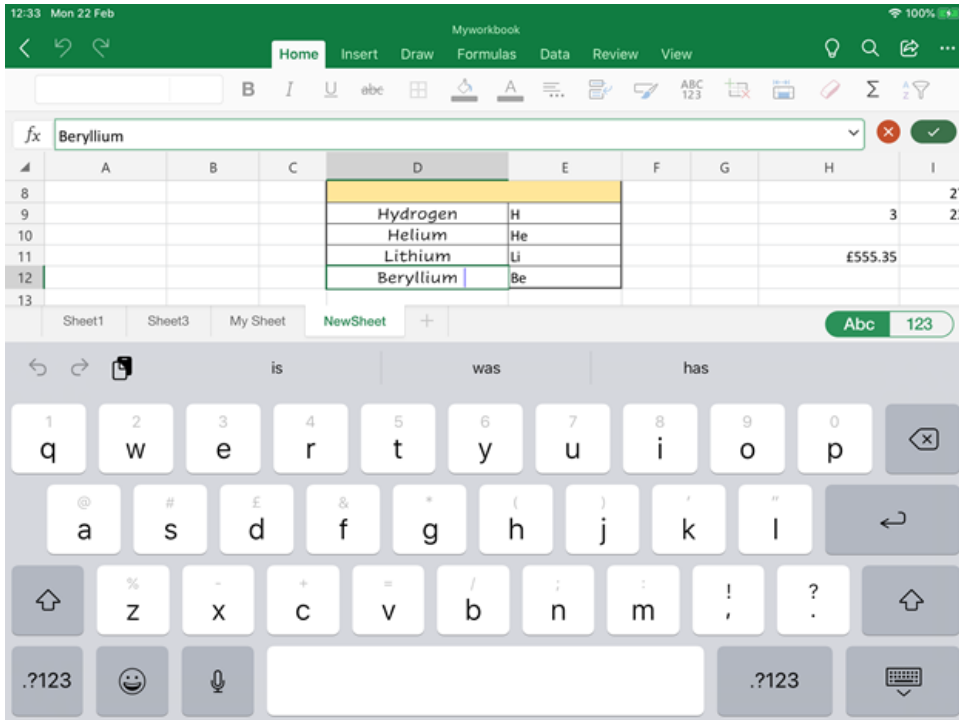
1. Tap and hold a cell to get the context menu



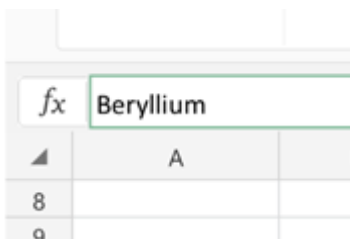
2. Select Edit, this will highlight and activate the keypad



3. Edit the contents of the cell

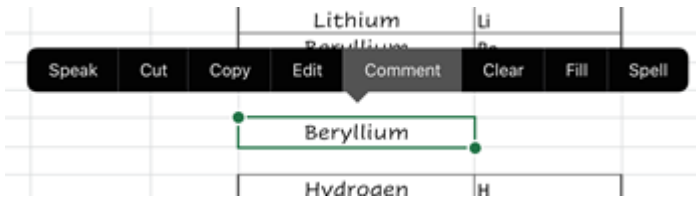


4. In the case of editing a cell with a formula, pay attention to the content of the formula bar

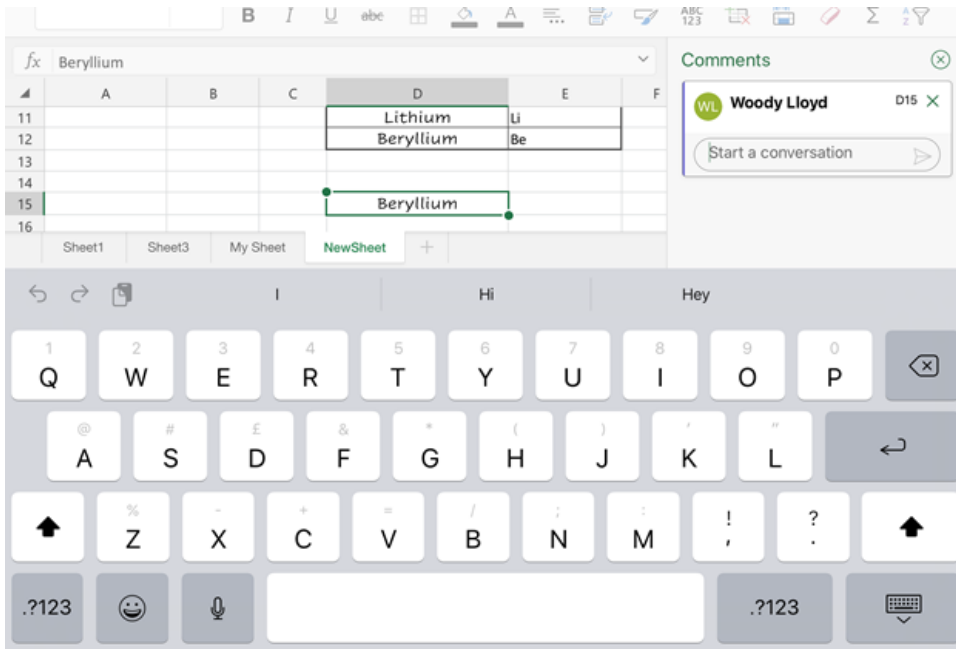


Comments are an opportunity to mark up your work and give more information about the content of a cell or range of cells

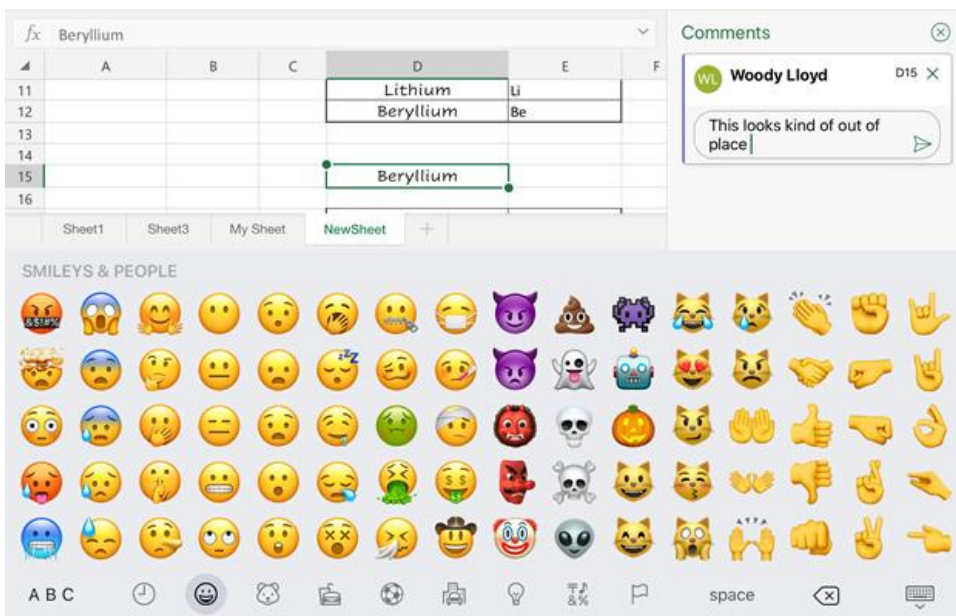
1. Tap and hold a cell to get the context menu



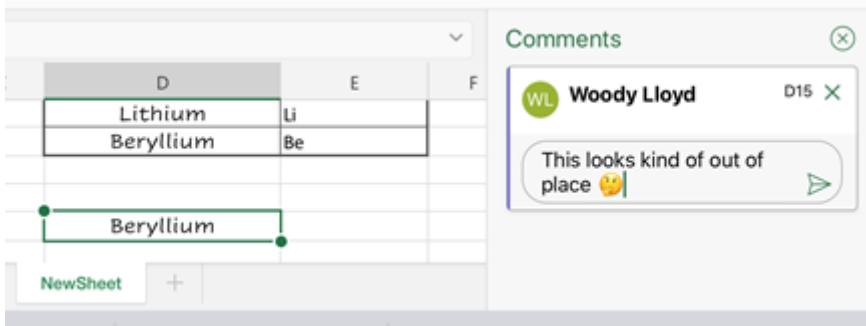
2. Tap Comment
3. From the comment box enter your text to add a comment which will relate to this cell



4. Add your comment (if you shared your worksheet already) -the other user(s) may be alerted to your comment

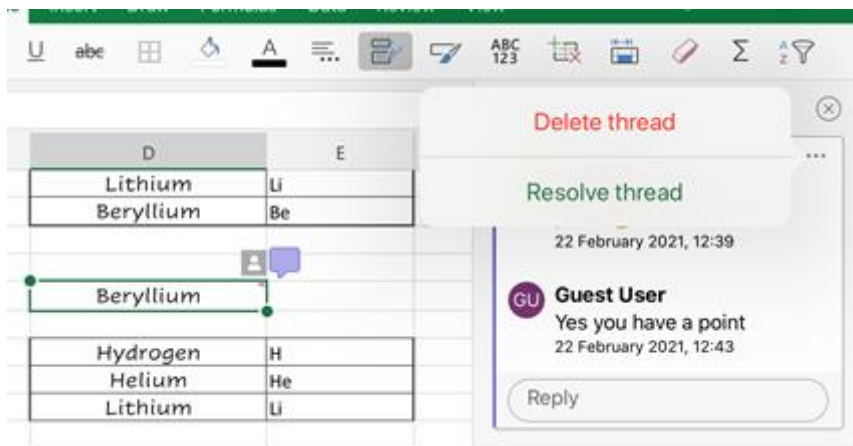
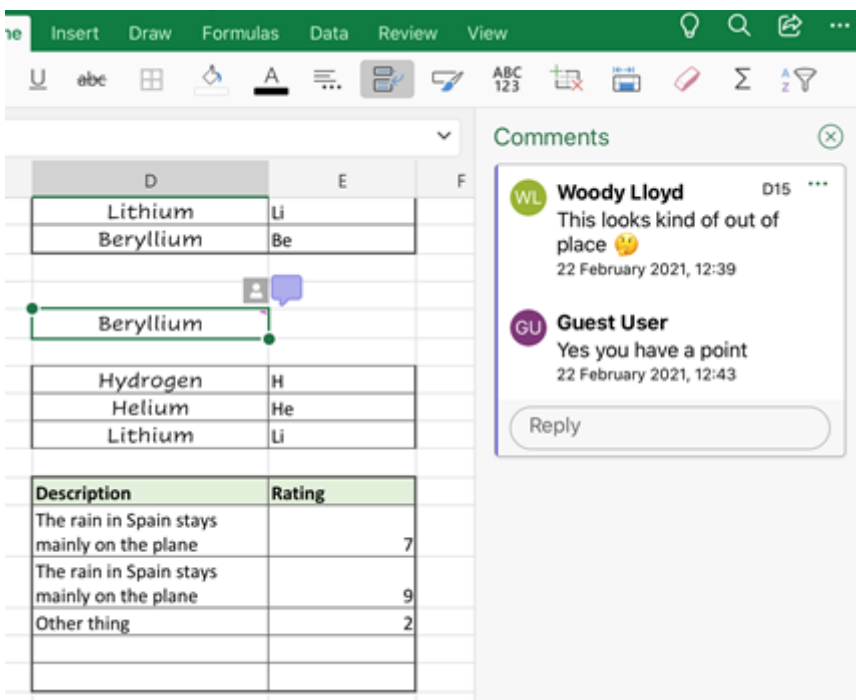


5. You can add emoticons (if your organisation or school allows)



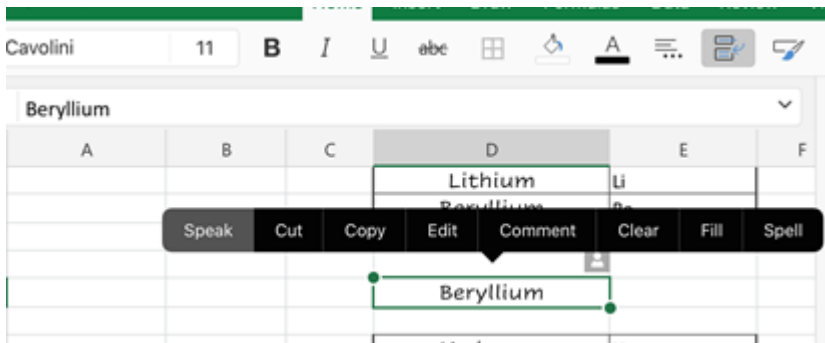
6. The “thread” (conversation or exchange of comments can optionally be “resolved” or “deleted”) to do this tap the ellipsis (three dots icon) on the top

right-hand corner of the comments panel



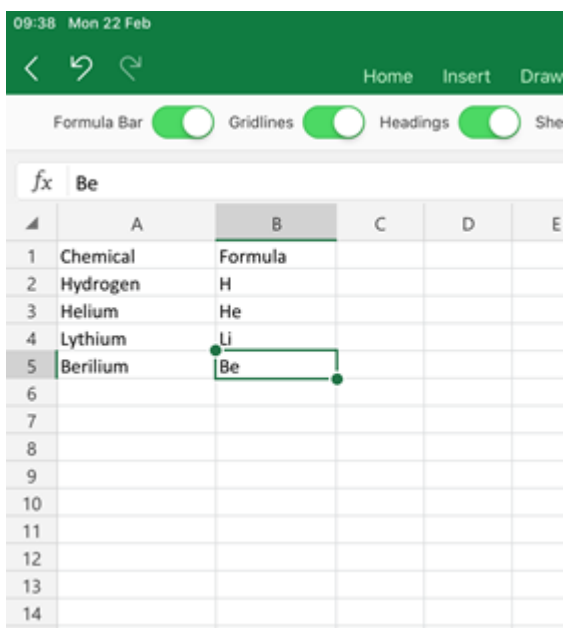
## Speak

1. Tap and hold a cell to get the context menu
2. The cell must have content
3. When the cell has content the context menu is extended with a Speak option
4. Tap Speak and if your volume is on, Voice Over will read out the contents

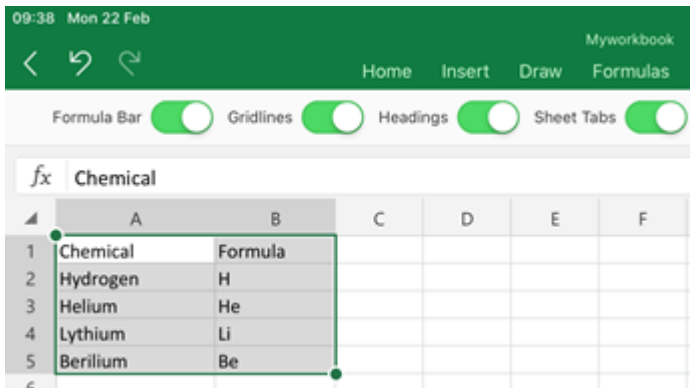


## Selecting a Range of Cells

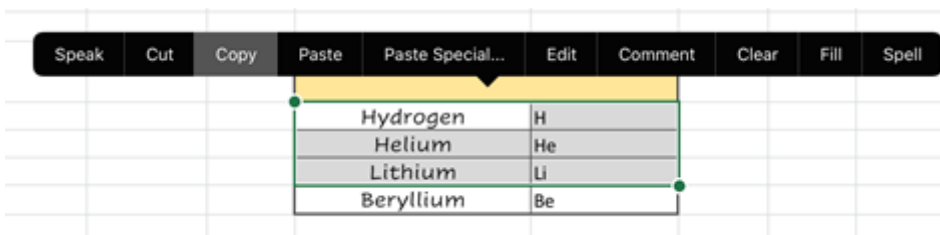
1. Select a cell until it is highlighted with a small circle (dot) on the top left corner and another on the bottom right corner.



- By holding and dragging either of these dots you can increase the highlighted area



- The highlighted area is a range of cells.
- You can now work with this range
- Tap hold the area to get the context menu for actions like, copy, cut and delete

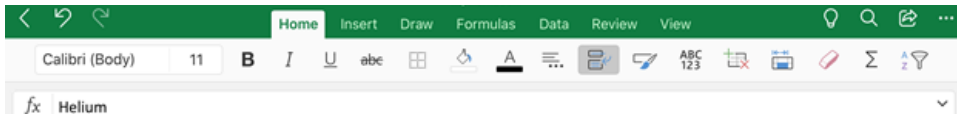


## 6. Exercise:

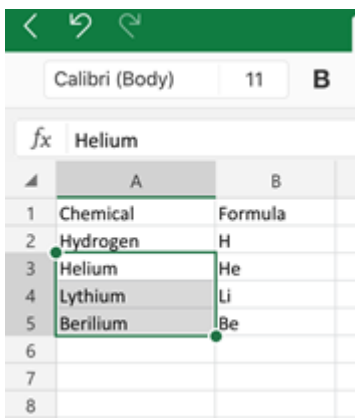
- Practice selecting a line of cells, tap hold the dot on the right-hand bottom corner and slide your finger across more cells on the same row
- Practice selecting a vertical group of cells, tap hold the dot on the right-hand bottom corner and slide your finger down more cells on the column
- Practice selecting a range of cells, tap hold the dot on the right-hand bottom corner and slide your finger diagonally away towards the bottom right of your screen

## Changing Font Style, Font Size, Bold, Italic, Underline and Font Colour

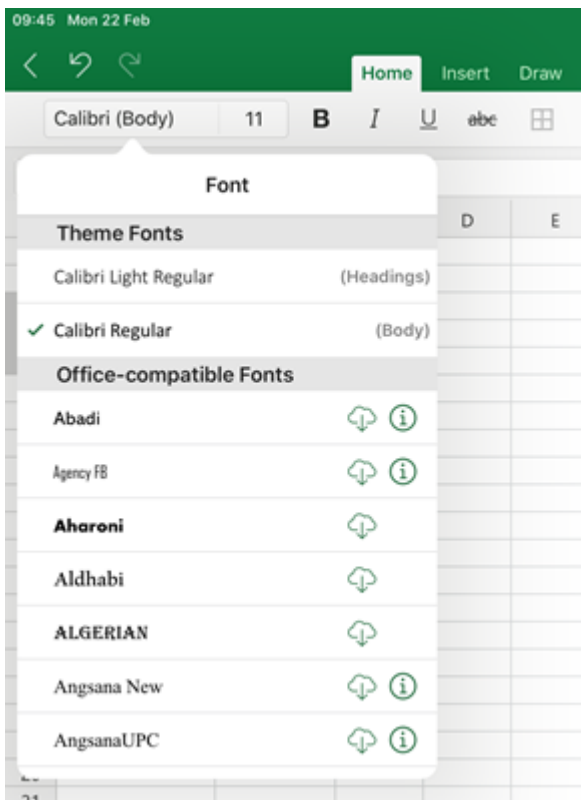
1. From the Top Menu (Home bar) you can format font options



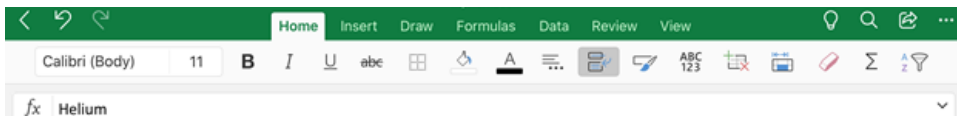
2. Select the cell or cells



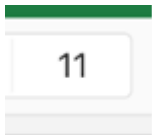
3. Choose from a list of fonts with the font drop down menu



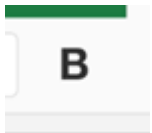
#### 4. Across the Top Menu (Home Bar) there are different font formatting options



##### a. Size



##### b. Bold



##### c. Italic



##### d. Underline




##### e. Strikethrough

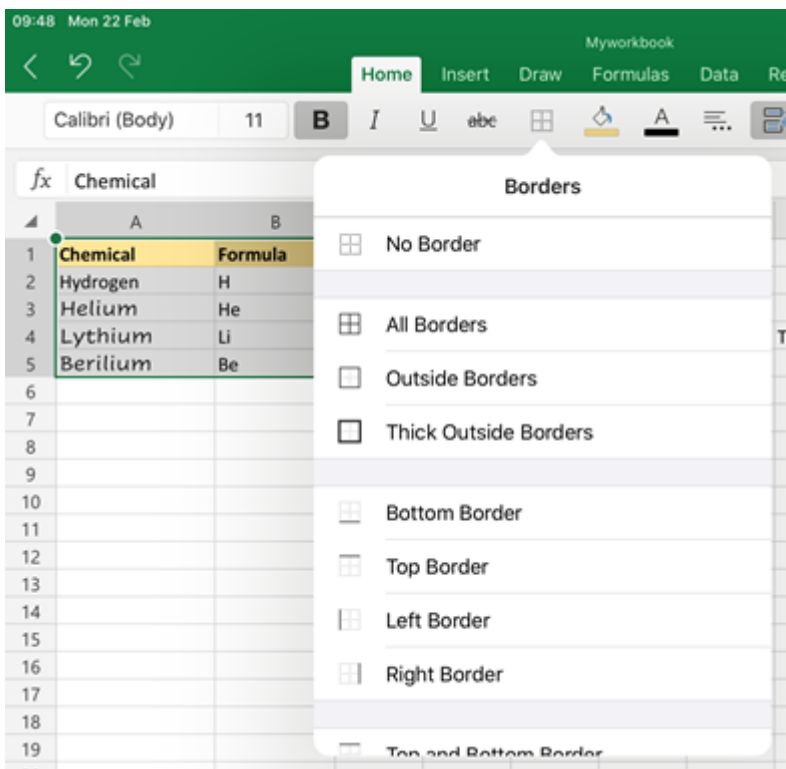


## f. Font Color



## Formatting Cells and Groups of Cells


1. Select the cells or group of cells
2. There are a number of formatting options available for the contents of a cell (see Changing font...)
3. Cells or groups of cells can be formatted with different styles and formats e.g. tap the Fill icon to change the background colour of a cell
4. **For example, to change borders of a group of cells to outline a range**
5. From the home menu tap the Borders icon  (a small dotted grid)
6. From the borders drop down menu tap the option you would like to use

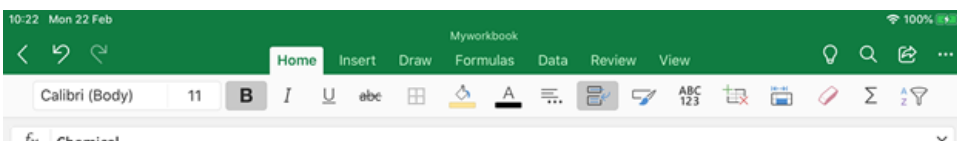


7. In this example we chose to format first with “All Borders” and to make the table stand out “Thick Outside Borders”

Chemical	Formula
Hydrogen	H
Helium	He
Lythium	Li
Berilium	Be

## Merge Cells

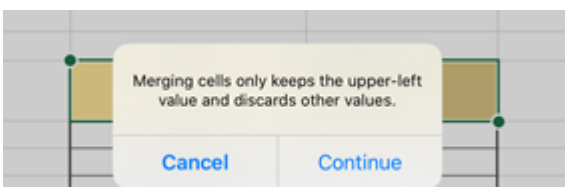
1. Tap/select the cells to merge
2. From the Top Menu, Home Bar tap the alignment icon  (three horizontal lines with three dots underneath)



3. From the alignment drop down menu tap “Merge & Centre”

Chemical	Formula
Hydrogen	H
Helium	He

4. Note the warning that only the contents of the leftmost cell will be kept in the resulting merged cell.



5. This example shows the result

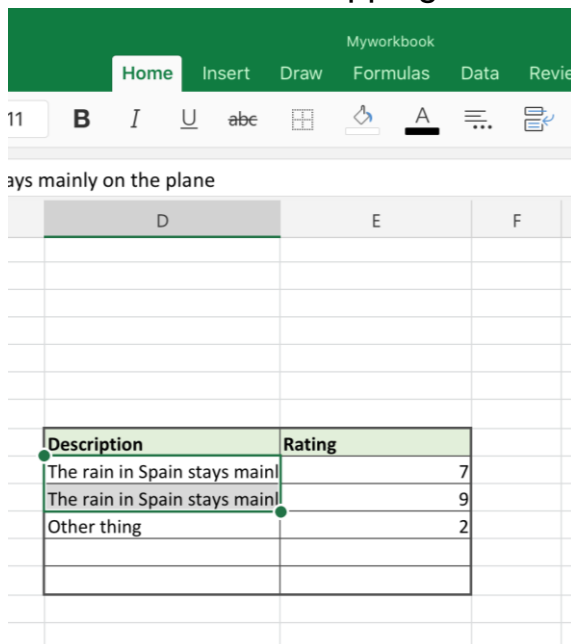
Chemical	
Hydrogen	H
Helium	He

## Word Wrapping

The need to wrap text in a cell may occur when the contents of one cell hide the contents of another. Instead of stretching the column width you may need or prefer to wrap the words.

Description	Rating
The rain in Spain stays mainl	7
The rain in Spain stays mainl	9
Other thing	2

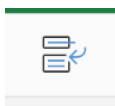
1. Select/tap the cell or cells or the whole column where you wish to apply text / word wrapping



The screenshot shows the Microsoft Excel interface. The 'Home' tab is selected on the ribbon, with options for Bold (B), Italic (I), Underline (U), and text color (abc). The ribbon also shows icons for text alignment (A), bullet points, and a list icon. Below the ribbon, the text 'ays mainly on the plane' is visible. A table is shown with the following content:

Description	Rating
The rain in Spain stays mainl	7
The rain in Spain stays mainl	9
Other thing	2

2. Tap word Wrap icon which is two lined boxes with an arrow pointing back into the box

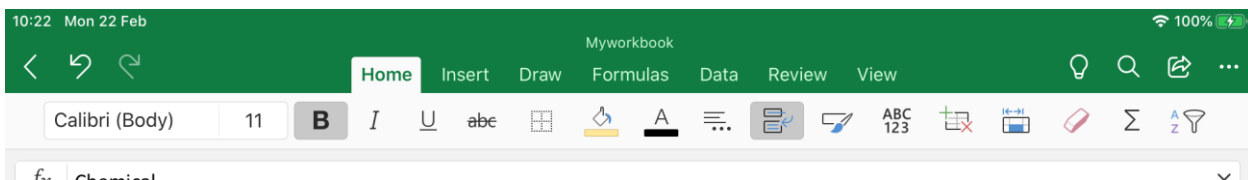


3. The text will then be shown in the box in full

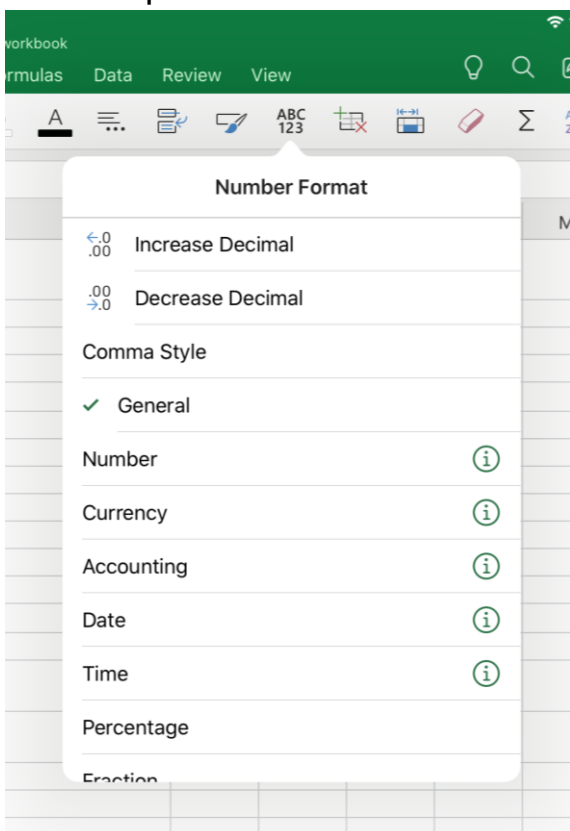
Description	Rating
The rain in Spain stays mainly on the plane	7
The rain in Spain stays mainly on the plane	9
Other thing	2

## Formatting Numbers

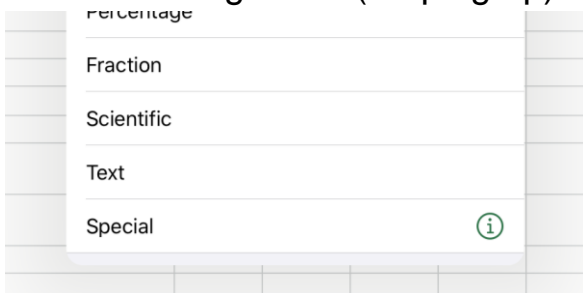
Formatting numbers is an important skill for working with spreadsheet data.



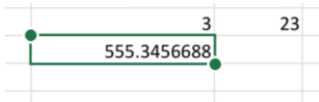
1. The Top Menu (Home Bar) has a letters/numbers icon
2. Tap the letter/numbers icon open up a list of number formatting options



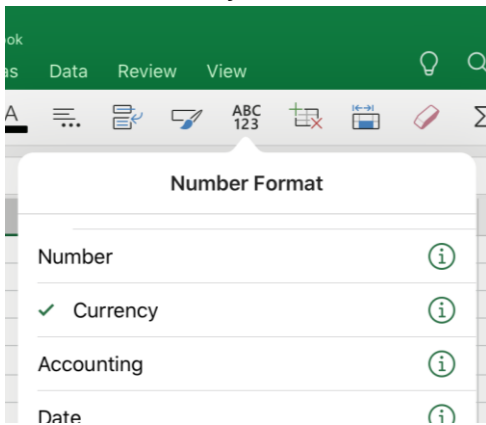
### 3. Scrolling down (swiping up) reveals more options



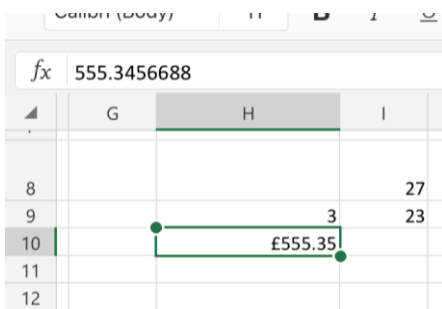
### 4. Select a cell with a number in it



### 5. In this example we have a number with a long decimal to format to a currency

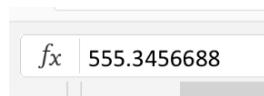


### 6. The result is a typical currency formatted number with 2 decimal places and the local currency symbol



### 7. To see the actual number held in the cell tap the cell and note the content

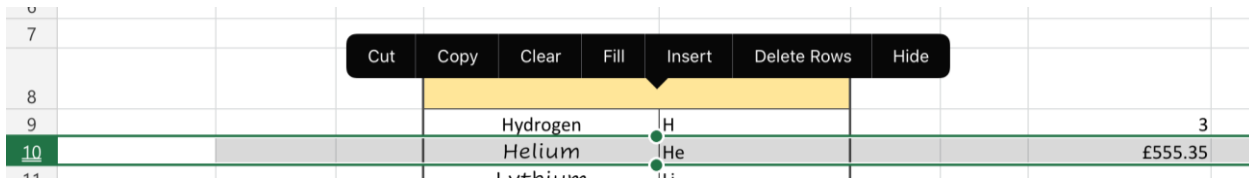
of the formula bar



## Inserting and Deleting Rows and Columns


Inserting and deleting rows and columns can be achieved in two ways

### From the context menu



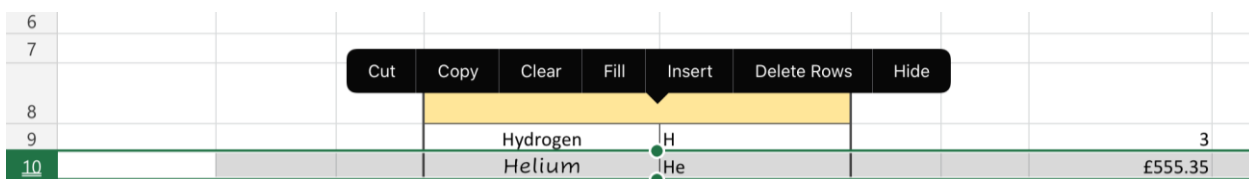
A screenshot of a spreadsheet showing a context menu over a selected row. The menu options are Cut, Copy, Clear, Fill, Insert, Delete Rows, and Hide. The 'Insert' option is highlighted. The spreadsheet data includes 'Hydrogen' (H) and 'Helium' (He) with a value of 3, and a monetary value of £555.35.

7						
8						
9		Hydrogen	H			3
10		Helium	He			£555.35

1. From the Top Menu, Home Bar tap the Insert & Delete icon  this is a small grid with a plus symbol top left and an X symbol bottom right.

Inserting cells rows and columns requires you to select a row or a column or a cell first.

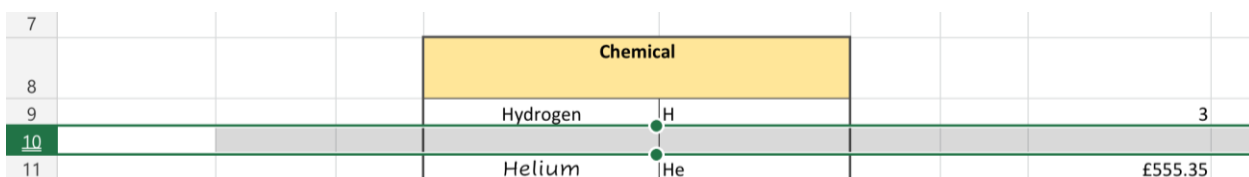
2. Select the row, column or cell adjacent to where you want to insert or delete.



A screenshot of a spreadsheet showing a context menu over a selected row. The menu options are Cut, Copy, Clear, Fill, Insert, Delete Rows, and Hide. The 'Insert' option is highlighted. The spreadsheet data includes 'Hydrogen' (H) and 'Helium' (He) with a value of 3, and a monetary value of £555.35.

6						
7						
8						
9		Hydrogen	H			3
10		Helium	He			£555.35

This results in a row being inserted across the entire worksheet (note how the numbers on the right have been separated which might not be desirable)

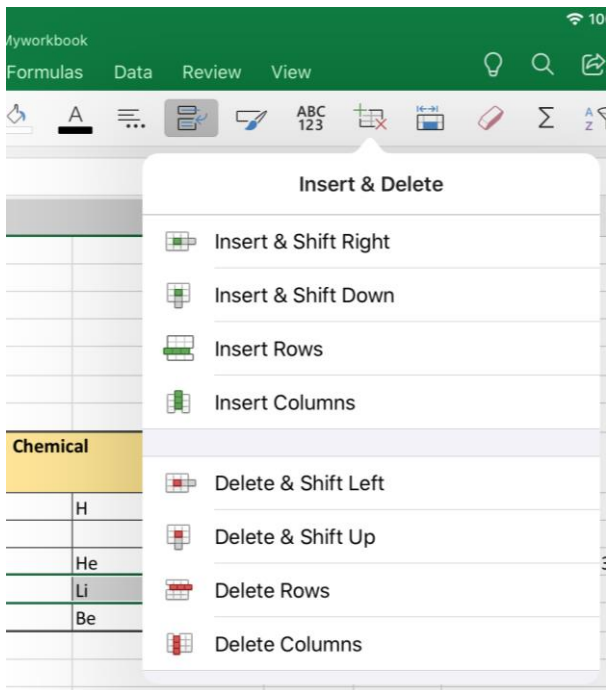


A screenshot of a spreadsheet showing a row inserted across the entire worksheet. The new row contains the text 'Chemical'. The original data is shifted down by one row.

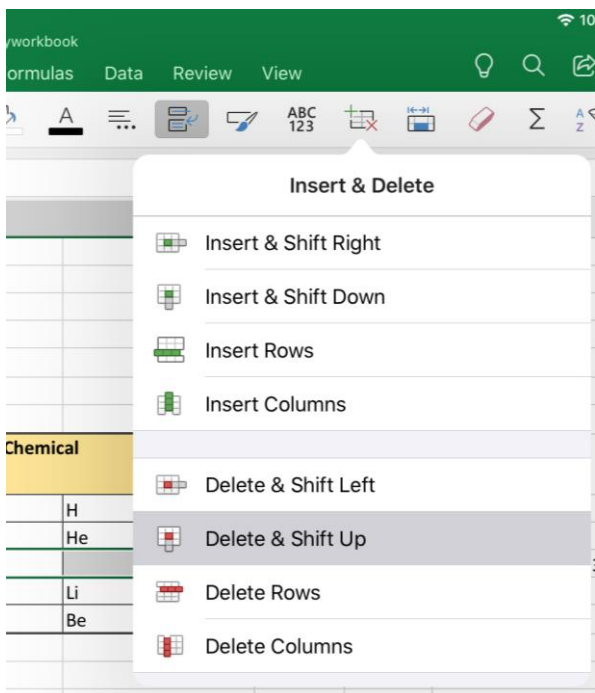
7						
8						
9		Hydrogen	H			3
10		Helium	He			£555.35
11						

3. Choose the option best suited to your task e.g.
- a. Insert a new table row. (without interrupting other parts of the worksheet)

Chemical	
Hydrogen	H
Helium	He
Lithium	Li



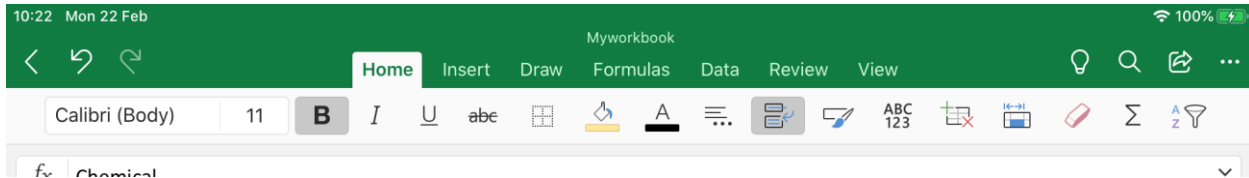
- b. Delete an excess row and move the cells up



## Resizing Cells

1. Select/tap the cell

Resizing a cell will affect other cells in the same row or column

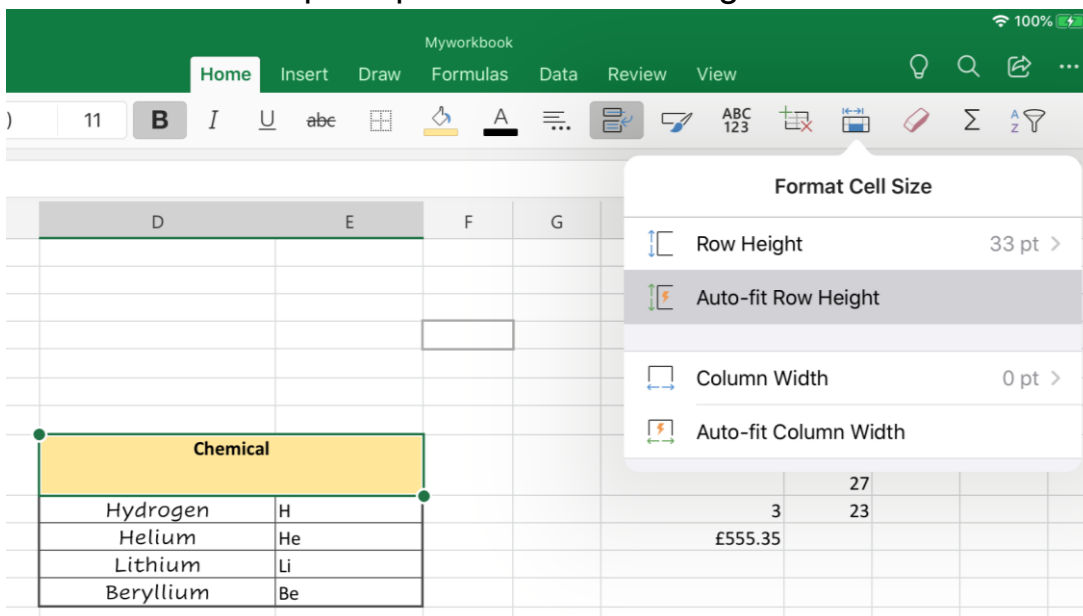


2. From the Top Menu, Home Bar

3. Tap the Format Cell Size icon  (a small grid box shape with two arrows above)

The resulting drop down menu allows you to Adjust the row height or the column width

4. In this example tap “Auto-fit Row Height”

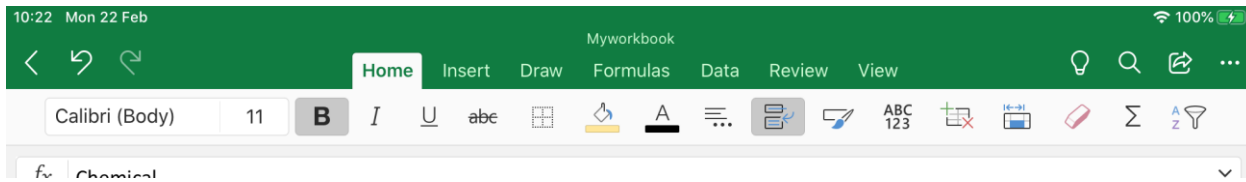



5. The result

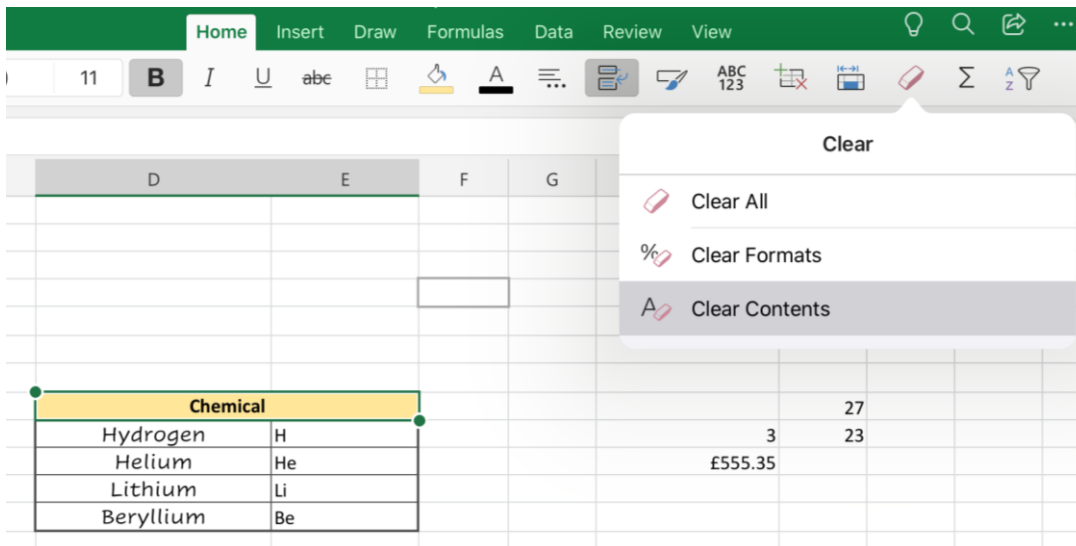
Chemical	
Hydrogen	H
Helium	He
Lithium	Li
Beryllium	Be

# Clearing Content and Format

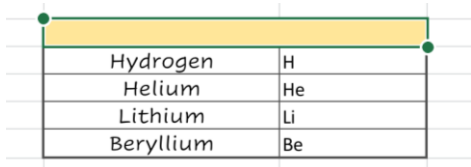
## 1. From the Top Menu, Home Bar



2. Tap the Clear icon  (a diagonal box, possibly meant to look like an eraser)
3. Tap what you would like to achieve from the Clear menu choices
  - a. Clear All
  - b. Clear Formats
  - c. Clear Contents



## 4. In this example we will Clear Contents



## Basic Maths Functions Using AutoSum

### 1. Either

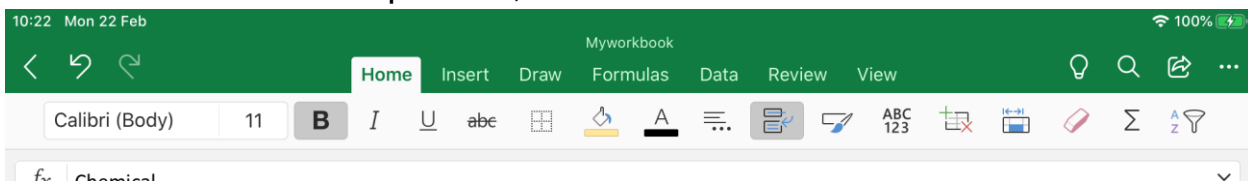
a. Select/tap a cell on the right-hand side of row of numbers OR


	H	I	J	K	L	M	N	
1								
2								
3								
4								
5								
6								
7		GOALS TABLE						
8		September	October	November	December			
9		Man Utd	10	11	15	11		
10		Man City	9	14	12	10		
11		Pompey	11	9	17	8		
12								

b. Select a cell below a column of numbers

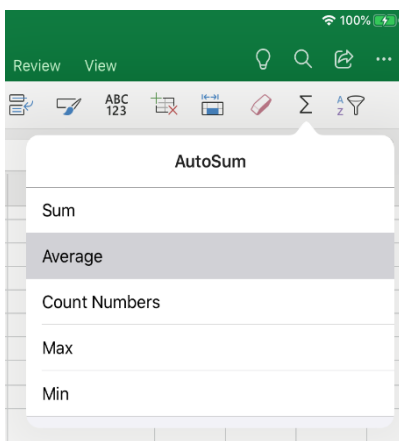
	H	I	J
1			
2			
3			
4			
5			
6			
7			
8		September	Octob
9		Man Utd	10
10		Man City	9
11		Pompey	11
12			
13			

### 2. Then from the Top Menu, Home Bar

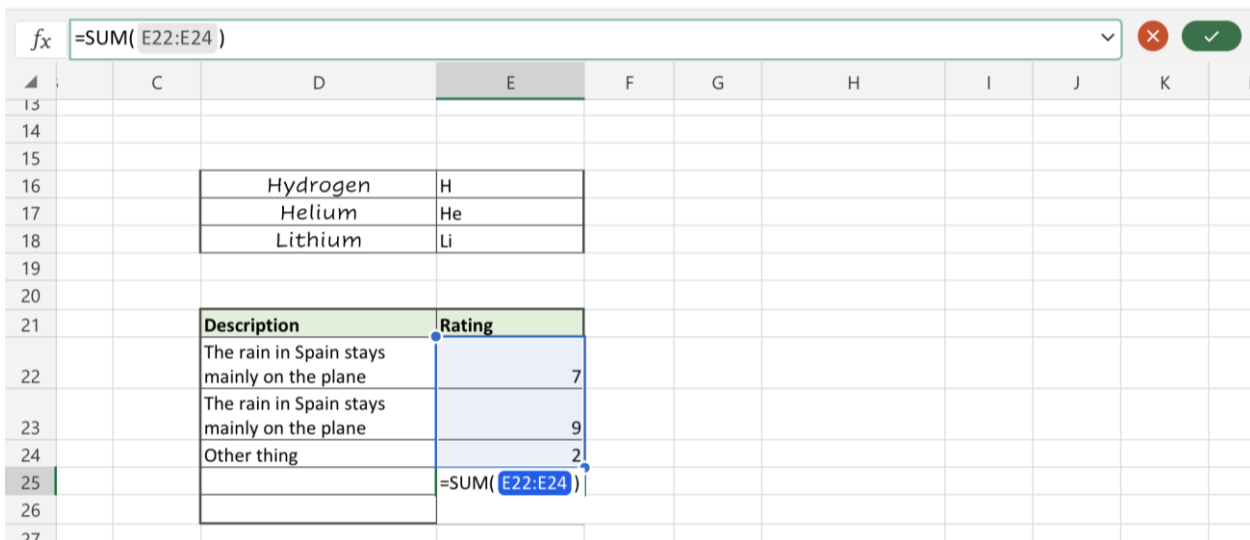


3. Tap the AutoSum icon  (the Greek Sigma icon which indicates sum or sum of)

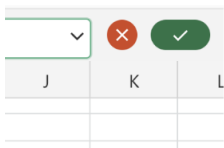
4. Select/tap the type of sum to perform from (Sum, Average, Min or Max)



5. Check that the formula includes all the cells

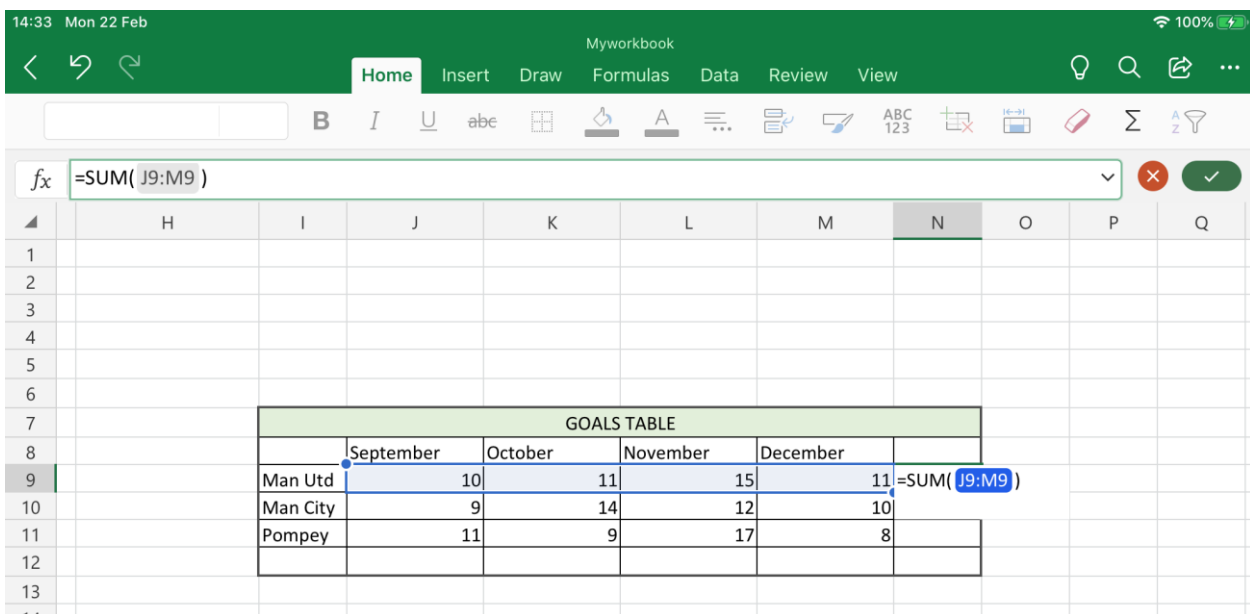


6. Tap the Tick Button to complete the task



7. Here is an example to calculate the SUM of all goals scored by a football team for 4 months

- a. Check the Sum
- b. Tap the tick button



### c. Result

GOALS TABLE						
	September	October	November	December		
Man Utd	10	11	15	11	47	
Man City	9	14	12	10		
Pompey	11	9	17	8		

8. Here is an example of the AVERAGE goals scored in September  
 a. Select the data and then tap Sum icon

The screenshot shows a mobile spreadsheet application interface. At the top, there's a green header bar with navigation icons and the text 'Myworkbook'. Below it is a toolbar with various icons including font settings, alignment, and the sum icon (Σ). The main area shows a grid with a table titled 'GOALS TABLE' embedded. The table has columns for months and rows for teams. The 'September' column is highlighted in blue, and a green selection handle is visible at the bottom of the table.

b. Choose Average and check the formula includes all numbers needed

This screenshot shows the same spreadsheet application with the formula bar at the top. The formula bar contains the text '=AVERAGE(J9:J11)'. To the right of the formula bar are two buttons: a red 'X' for clearing the formula and a green checkmark for confirming it. The spreadsheet below shows the 'GOALS TABLE' with the 'September' column selected, and the formula '=AVERAGE(J9:J11)' is now visible in the cell below the table.

c. Tap the tick button

- d. The result is given - (the average goals for all teams in September == 10)

GOALS TABLE					
	September	October	November	December	
Man Utd	10	11	15	11	47
Man City	9	14	12	10	
Pompey	11	9	17	8	
	10				

## 9. To calculate a total outside of the table

- Add some text to explain the sum
- Tap the cell next to our sum text
- Tap AutoSum → Select Sum

The screenshot shows a spreadsheet editor interface. At the top, the formula bar contains the formula `=SUM(J9:M11)`. Below the formula bar, a table is visible with the following data:

GOALS TABLE					
	September	October	November	December	
Man Utd	10	11	15	11	47
Man City	9	14	12	10	
Pompey	11	9	17	8	
	10				

Below the table, in cell L16, there is a text label "Sum all teams all months" and a formula cell containing `=SUM(J9:M11)`.

- d. Type or edit the formula or adjust the bounding box to cover from the top left cell to the bottom right cell - in this instance `=SUM(J9:M11)`

- e. This results as below

GOALS TABLE					
	September	October	November	December	
Man Utd	10	11	15	11	47
Man City	9	14	12	10	
Pompey	11	9	17	8	
	10				

Below the table, in cell L16, there is a text label "Sum all teams all months" and a cell containing the value 137.

## Maths Functions Using Formula and Standard Spreadsheet Functions

There are a wide range of built-in math functions for Excel.

Using the notation **=FUNCTION(Values)** Spreadsheets are powerful tools for calculating and advanced math.

Some important basic functions include (SUM, MIN, MAX and AVERAGE) and examples will be covered below

In all these cases we will be using the functions of a range or cells from left to right, top to bottom or top left to bottom right

It is important to understand every cell has a column and then a row reference A1 means column A row 1. It is the first cell in a spreadsheet.

### Sum/average or count a range of cells

If we want to add the values of two cells

=SUM(A1+B1)

If we want to add all the values in a range of cells with use the : colon character between the first and last cell in the row, column or range as follows

=SUM(A1:A10) is a sum of all the numbers in column A from row 1 to row 10.

=SUM(A1:J10) is a sum of all the numbers in a row from column A to column J

Suppose you wanted to divide those cells by the number of values in order to calculate the **average**.

Excel allows two ways to do it the simple way is to use the AVERAGE function as follows

=AVERAGE(A1:J10) produces for average number given the count of the numbers in a row from column A to column J

We might also do this using the function COUNT as follows

=SUM(A1:J10) / COUNT(A1:J10)

Should we happen to know the count or number of values in advance we could “hard code” that value as follows

=SUM(A1:J10)/10

Here are some helpful screenshots to illustrate how you might use formula within your spreadsheet

MAX function example

The screenshot shows an Excel spreadsheet with a formula bar containing `=MAX(J9:M11)`. The spreadsheet contains a table titled "GOALS TABLE" with the following data:

	September	October	November	December	
Man Utd	10	11	15	11	47
Man City	9	14	12	10	45
Pompey	11	9	17	8	45
Avg	10	11.3	14.7	9.7	
Lowest number of goals scored by a team in a month					8
Sum all teams all months					137
Avg goals scored per month across the year so far					11.4
Highest number of goals scored by a team in a month					17

## Insert a formula in a cell

In the example, “Avg goals scored per month across the year so far”

The screenshot shows the Microsoft Excel interface. The formula bar at the top displays the formula `=SUM(J9:M11)/COUNT(J9:M11)`. Below the formula bar is a table with the following data:

GOALS TABLE					
	September	October	November	December	
Man Utd	10	11	15	11	47
Man City	9	14	12	10	45
Pompey	11	9	17	8	45
Avg	10	11.3	14.7	9.7	
	Lowest number of goals scored by a team in a month			8	
	Sum all teams all months			137	
	Avg goals scored per month across the year so far			11.4	

see the formula

`=SUM(J9:M11)/COUNT(J9:M11)`

the same result could be given from the formula

`=AVERAGE(J9:M11)`

## Sorting and Filtering (Including Data Menu)

### Filter data

Adding filters to a table of data

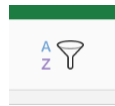
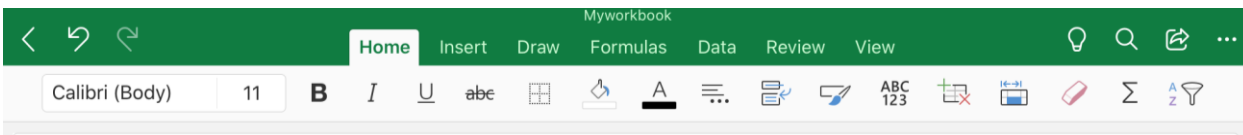
1. Let's make two identical copies of our football goals table
2. The first table is hard coded to order teams by most goals scored and then alphabetically
3. What if we add filters to a table?

4.

a. First we must careful select all columns and rows we wish to filter / sort and their labels

GOALS TABLE						
	September	October	November	December	Totals	
Man Utd	10	11	15	11	47	
Man City	9	14	12	10	45	
Pompey	11	9	17	8	45	

b. Then from the Top Menu, Home Bar



c. Tap the Sort & Filter icon (a funnel with an A above a Z on the left)

d. Our filters are in place

GOALS TABLE						
	September	October	November	December	Totals	
Man Utd	10	11	15	11	47	
Man City	9	14	12	10	45	
Pompey	11	9	17	8	45	

5. Now we can do imaginative things like order the table by who scored the most goals in November

a. Tap the filter “down arrow” icon you wish to use

GOALS TABLE	
▼	November ↓
9	17
11	15

b. In this case we chose November

The screenshot shows the Excel mobile app interface. The 'Home' tab is active. A 'Sort and Filter' menu is open over the 'GOALS TABLE' data. The menu options are:

- Smallest to Largest (A-Z)
- Largest to Smallest (Z-A)
- Number Filters
- Clear Filter
- Select All

The table data is as follows:

GOALS TABLE			
	September	October	November
Man Utd	10	11	15
Man City	9	14	12
Pompey	11	9	17

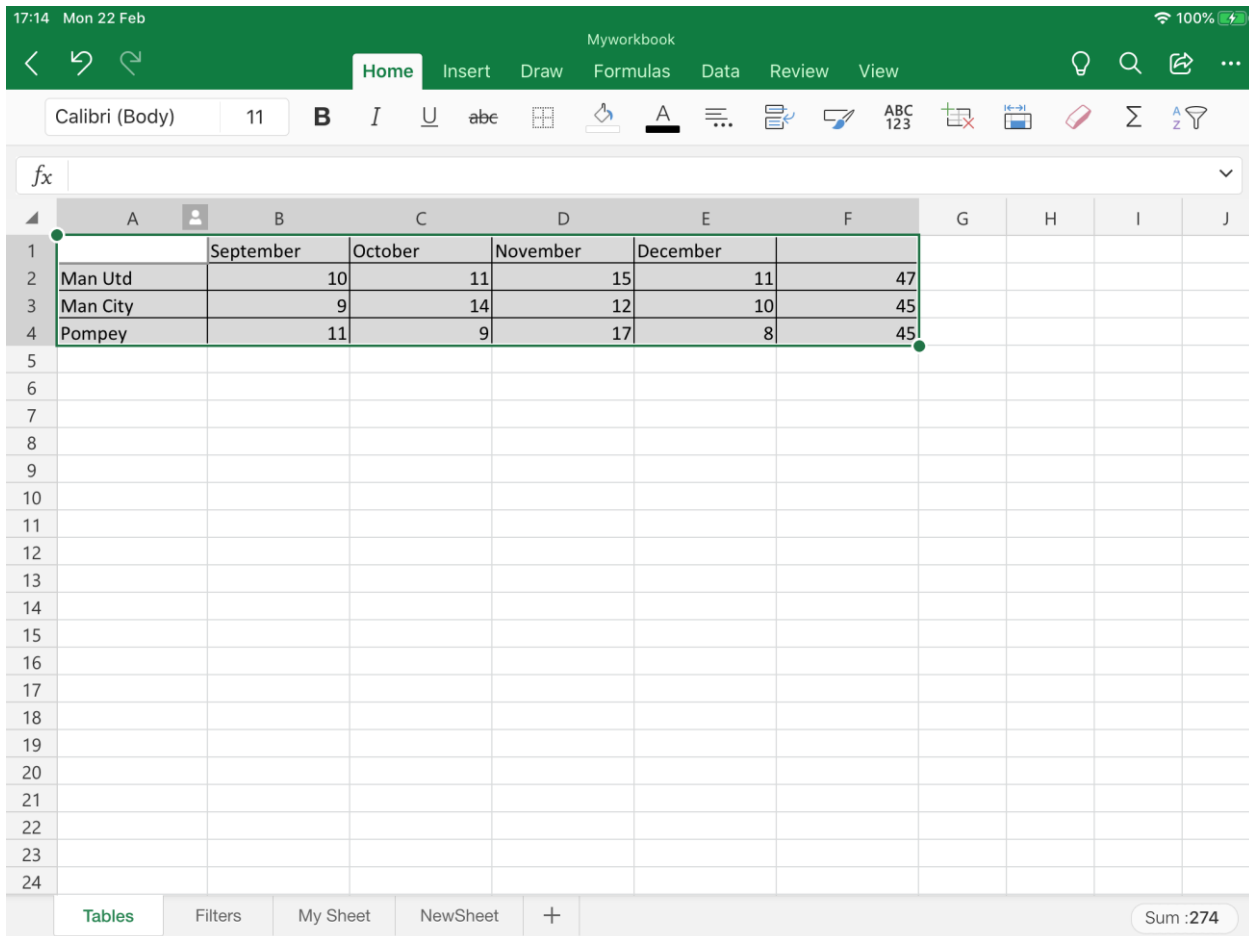
The screenshot shows the completed 'GOALS TABLE' in the Excel mobile app. The table now includes a 'Totals' column. The data is as follows:

GOALS TABLE					
	September	October	November	December	Totals
Man Utd	10	11	15	11	47
Man City	9	14	12	10	45
Pompey	11	9	17	8	45

## Inserting and Editing Tables

Inserting a table into existing data or a copy of existing data will bring powerful table features to your skillset. Suggest copying and pasting a range of data from another sheet to practise

### 1. Let's copy our football data into a new sheet called Table

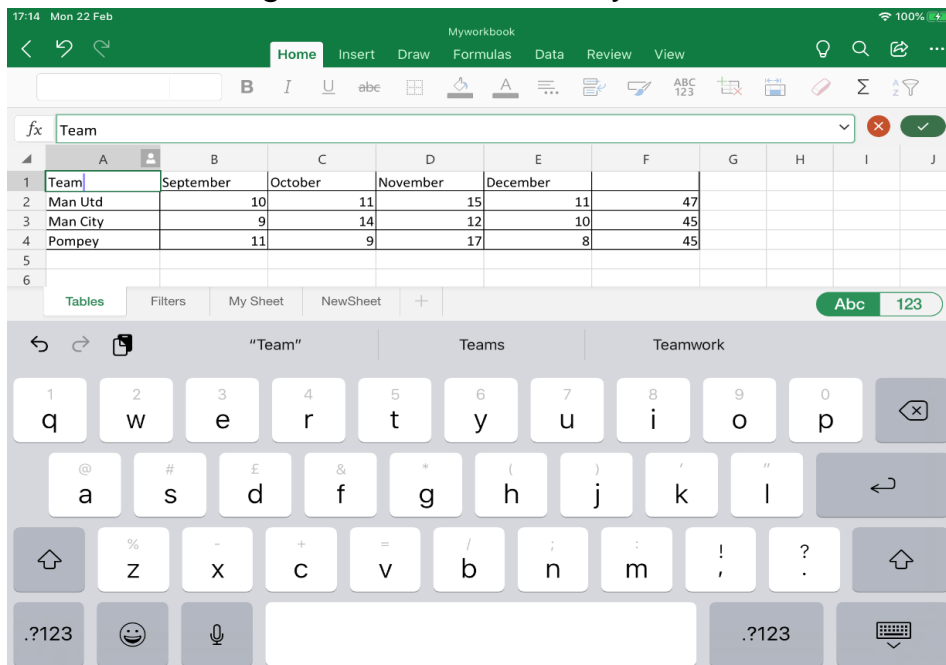


The screenshot shows the Microsoft Excel app on an iPad. The interface includes a top navigation bar with 'Home', 'Insert', 'Draw', 'Formulas', 'Data', 'Review', and 'View' tabs. Below this is a ribbon with various icons for text formatting, alignment, and data manipulation. The main workspace displays a spreadsheet with a table containing the following data:

	September	October	November	December	
Man Utd	10	11	15	11	47
Man City	9	14	12	10	45
Pompey	11	9	17	8	45

The bottom of the screen shows a 'Tables' tab, a 'Filters' button, and a 'Sum :274' indicator.

### 2. Make sure our headings have labels as they are hard to edit via the iPad app

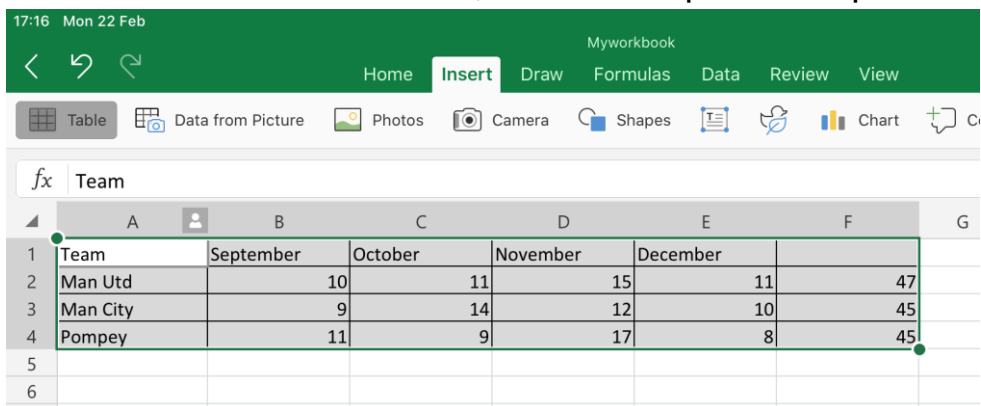


The screenshot shows the same Microsoft Excel app on an iPad, but with a keyboard overlay. The table now has a 'Team' header in cell A1. The data is as follows:

Team	September	October	November	December	
Man Utd	10	11	15	11	47
Man City	9	14	12	10	45
Pompey	11	9	17	8	45

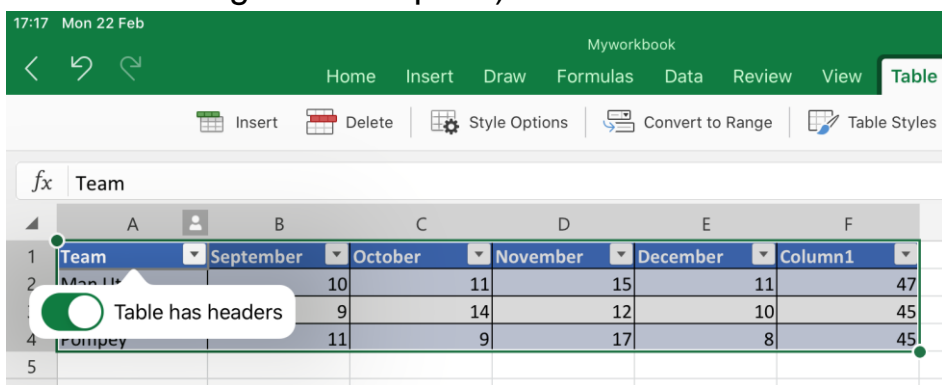
The keyboard is visible at the bottom, and the 'Team' header is highlighted. The bottom of the screen shows the 'Tables' tab, 'Filters' button, and 'Sum :274' indicator.

### 3. With our data selected, from the Top Menu tap Insert

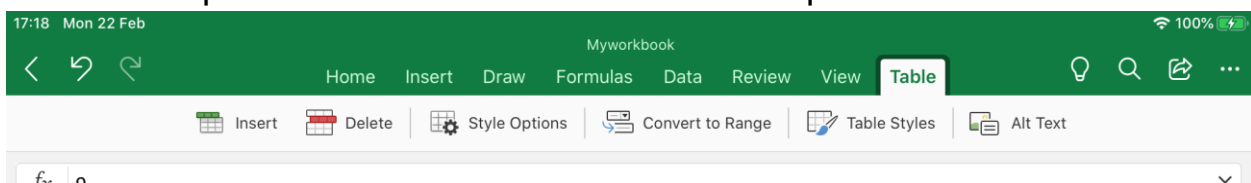


4. From the Top Menu Insert Bar tap the table icon (a plain grid with the word table next to it)

5. Excel should recognise the headings (note the substitution of Column1 for the blank label... we will edit that later by tapping on the cell and then selecting the edit option)



6. When we select a cell within the resulting Table, the Top Menu reveals a new option "Table" and we can select or tap that to reveal the Table Bar



7. From the Table Bar there are a number of quick menu options including "Alt Text"

8. Let's add some Alt Text to our table this can be very helpful for screen readers and pupils with a severe vision impairment

17:20 Mon 22 Feb Myworkbook 100%

Home Insert Draw Formulas Data Review View **Table**

Insert Delete Style Options Convert to Range Table Styles Alt Text

fx 9

	A	B	C	D	E	F
1	Team	September	October	November	December	Column1
2	Man Utd	10	11	15	11	
3	Man City	9	14	12	10	
4	Pompey	11	9	17	8	
5						
6						

Alt Text  
DESCRIPTION  
A table to keep tallies of which teams are scoring how many goals per month

Tables Filters My Sheet NewSheet +

"month" monthly months

q w e r t y u i o p

@ # £ & \* ( ) ' " a s d f g h j k l

z x c v b n m , ; .

.?123 .?123

### 9. Let's Insert a row for another popular football team

17:21 Mon 22 Feb Myworkbook 100%

Home Insert Draw Formulas Data Review View **Table**

Insert Delete Style Options Convert to Range Table Styles Alt Text

Insert

- Insert Above
- Insert Below
- Insert Left
- Insert Right

	D	E	F	G	H	I	J
	November	December	Column1				
1	15	11	47				
4	12	10	45				
9	17	8	45				
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Tables Filters My Sheet NewSheet +

## 10. And paste in the data

The screenshot shows an Excel spreadsheet with a table containing the following data:

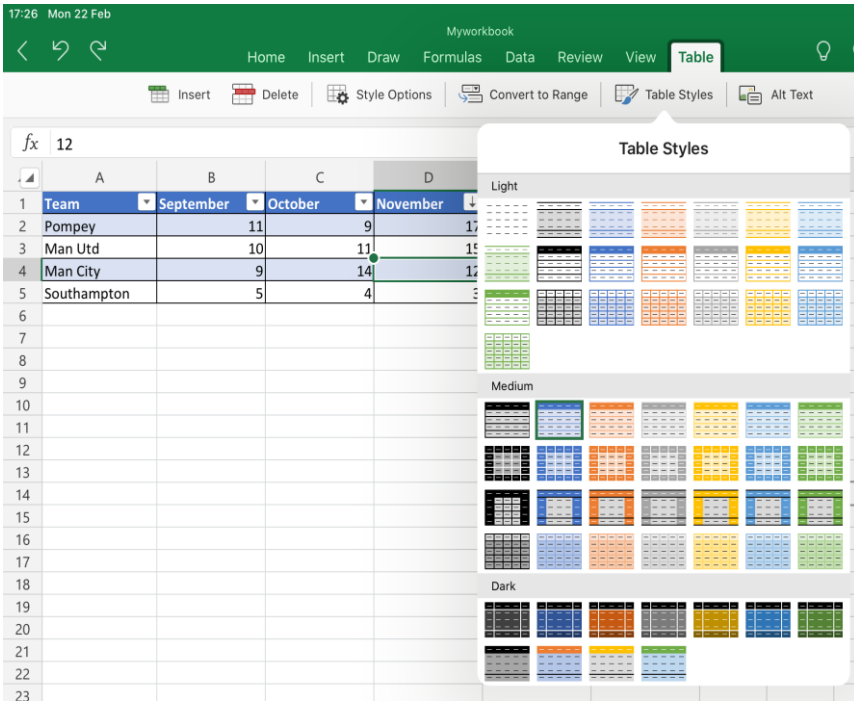
Team	September	October	November
Man Utd	10	11	15
Man City	9	14	12
Pompey	11	9	17
Southampton	5	4	3

The 'Sort and Filter' menu is open, showing options: Smallest to Largest, Largest to Smallest, Number Filters, and Clear Filter. A search bar and 'Select All' option are also visible.

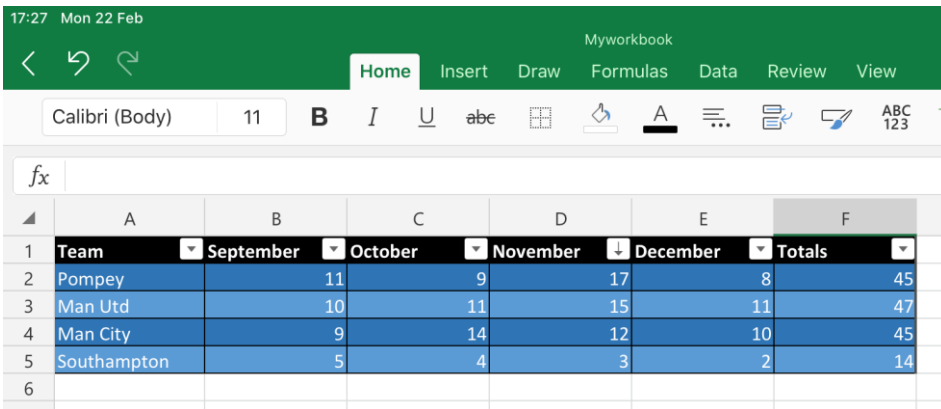
## 11. We can use the filters

## 12. Finally, although other options are available, let's format our table to look nicer by choosing from a range of quick styles

The screenshot shows the same Excel spreadsheet, but with the 'Table Styles' dropdown menu open. The menu displays various style options categorized into Light, Medium, and Dark themes. The table data is the same as in the previous image.

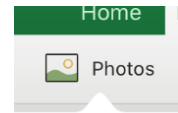


13. (with Column1 edited now to say Totals)

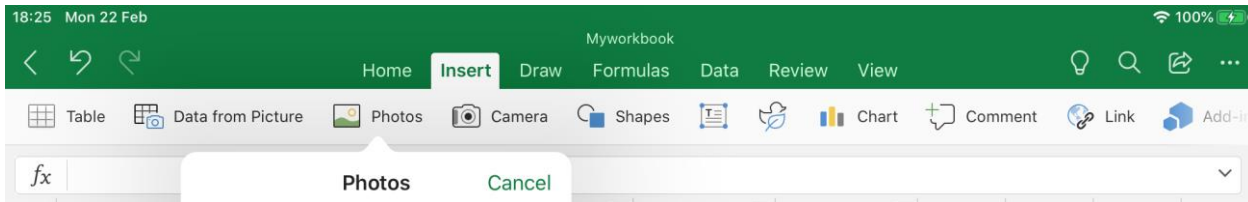


## Insert and Editing Photos

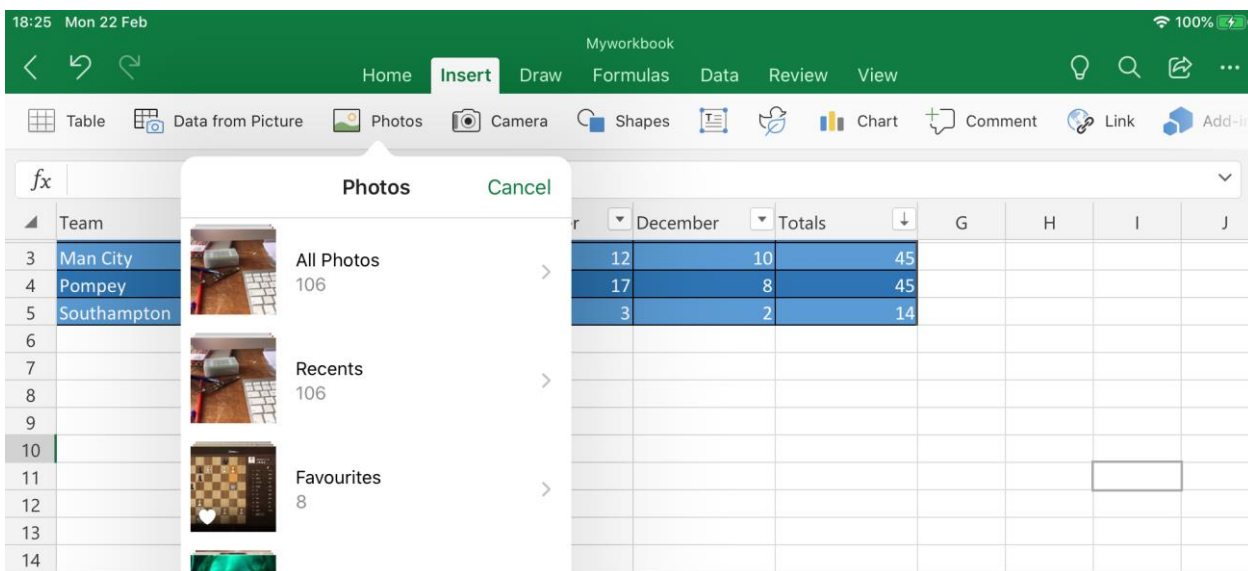
1. From the Top Menu → Insert Bar



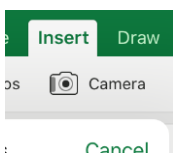
2. Tap Photos Icon (a landscape with the word Photos next to it)



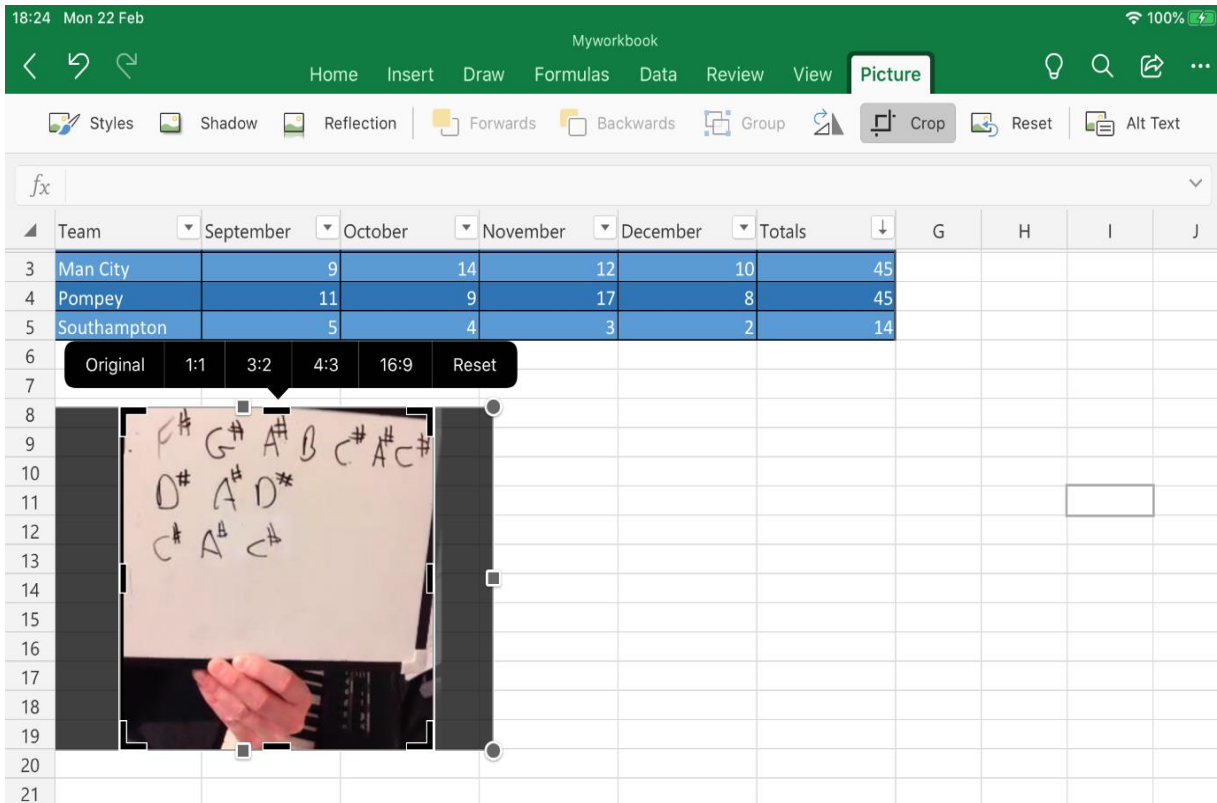
3. From a choice of your device Photos folders tap the image you want to insert



4. OR tap Camera to take a photo with your iPad

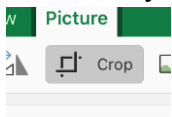


## 5. Tapping and selecting the image brings up a Picture tab in the Top Menu

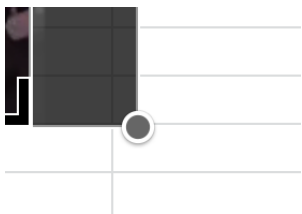


## 6. Select the Picture Tab to show the Picture editing menu

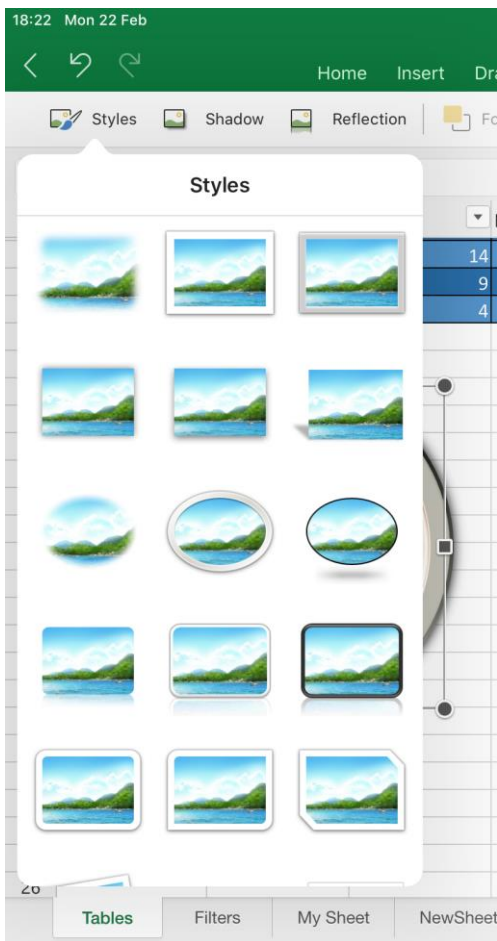
## 7. For example, tap the Crop Icon (two overlapping corners) to trim the sides of your picture



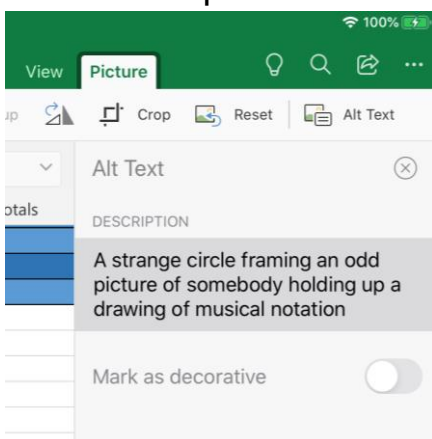
## 8. To resize a picture Tap and hold a corner circle on the outline of your selected image



9. There are a number of paid and free styling options to frame the picture in a circle

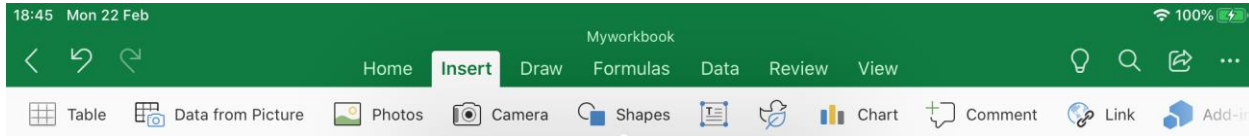


10. Importantly for screen readers you can add Alt text to describe the image for blind users, you may check/uncheck decorative if the image is not important to the context of the sheet.

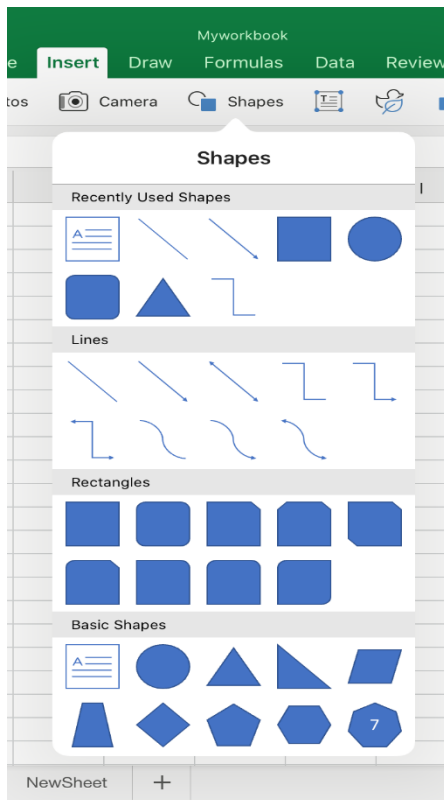


## Inserting and Editing Shapes

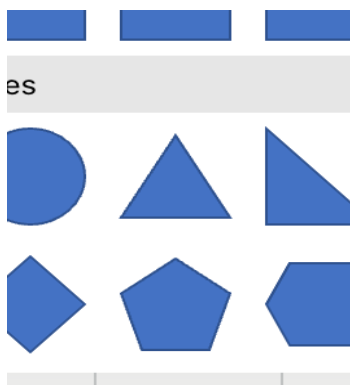
1. From Top Menu → Insert Tab tap/select the Shapes icon (a circle overlapped by a square with the word Shapes next to it)



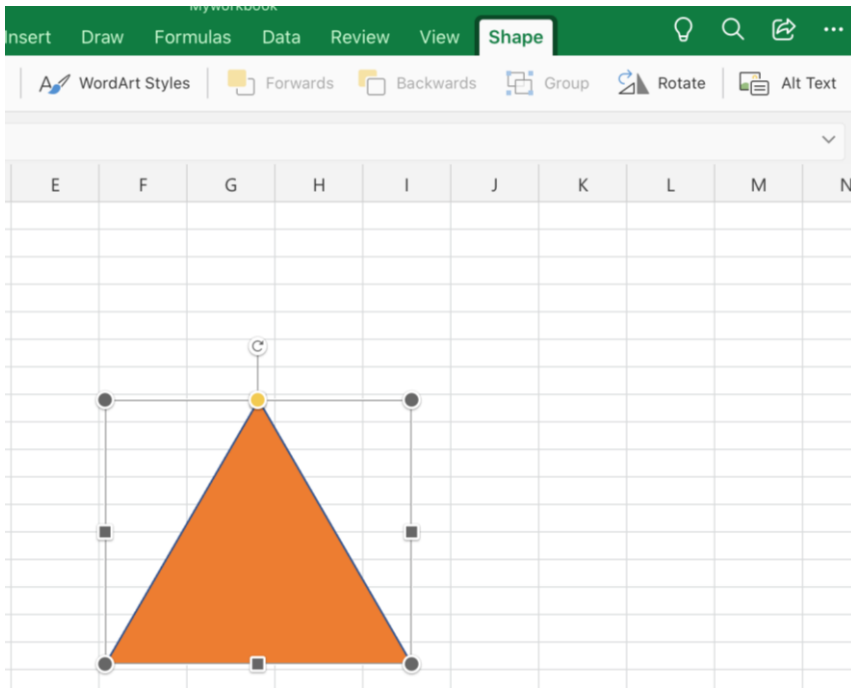
2. There are a number of shapes to choose from in the Shapes drop down



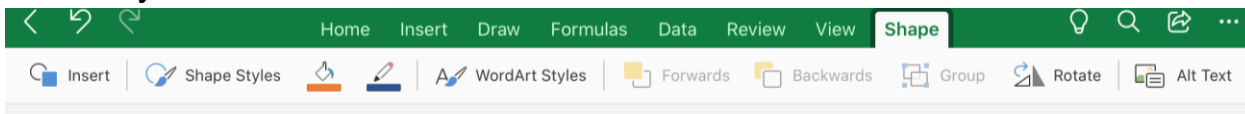
3. Choose a shape



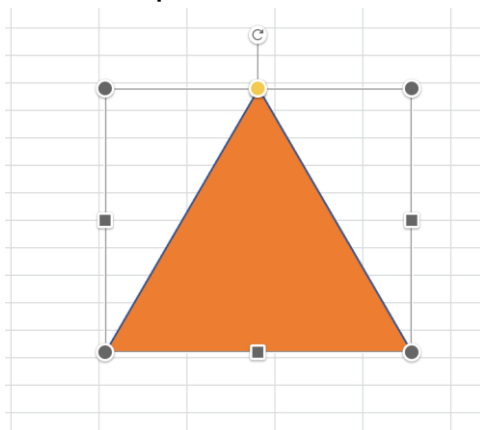
4. Select the shape (e.g. triangle) the “Shape” Tab is revealed in the Top Menu



5. In the Shape menu there is an array of styling options; Insert, Shape Styles, Fill Colour, Outline Colour... and more



6. Tap the Fill icon (A tipped bucket of pain) and select a colour from the color drop down

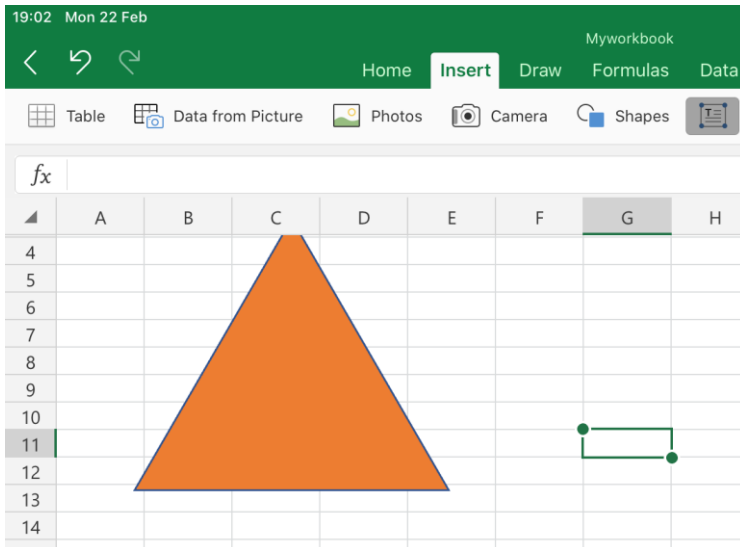


7. The shape can be resized but not cropped

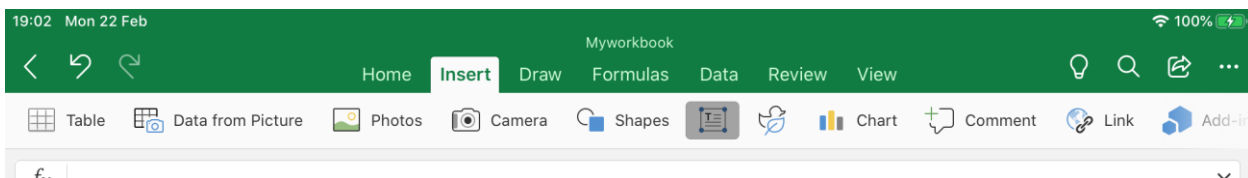
# Inserting and Editing Text Boxes

We can insert a text box which is simple a shape with the text ready to edit

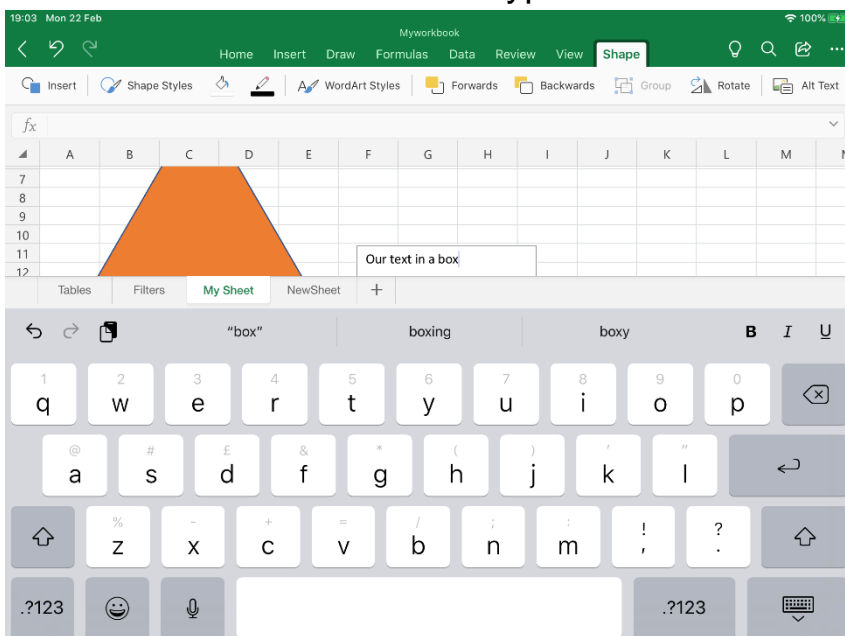
1. Select a cell near where you wish to place the text box

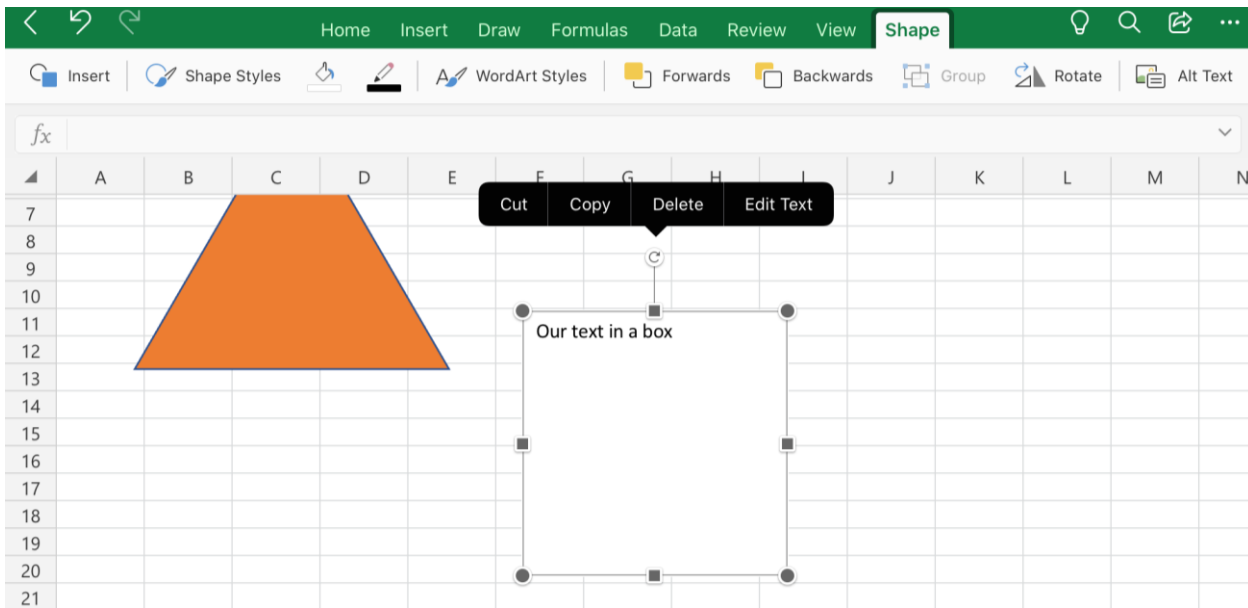


2. From the Top Menu → Insert Bar → tap the Text Box icon (a box with lines and a T in the top left corner)



3. Instantly we enabled edit mode for our placed text box so we can type in the text and close the keypad when we are done.

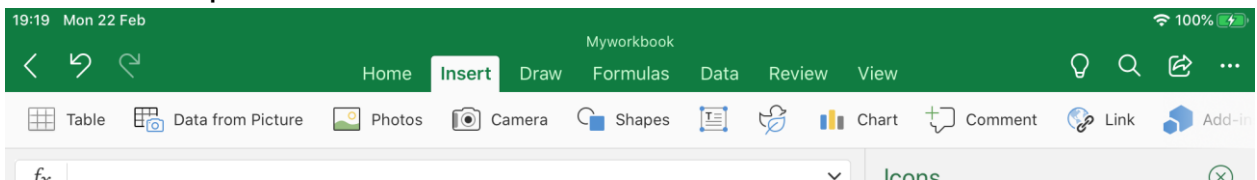




## Inserting and Editing Icons

Icons are sharp vector graphics we can insert into a chart to provide context and instantly informative labels.

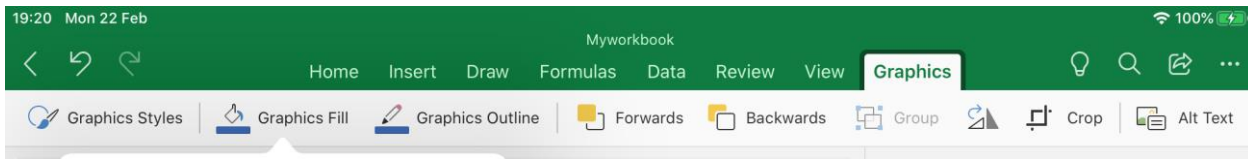
1. From the Top Men → Insert Bar → Select the Icons icon



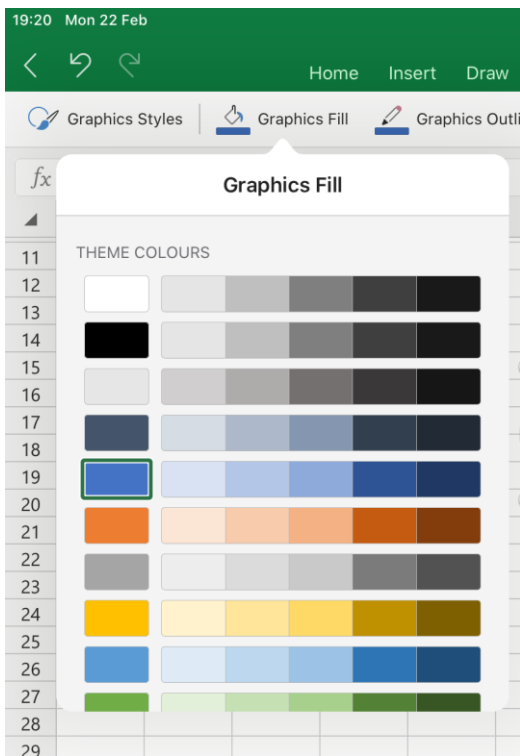
2. You may need to wait while the icons are generated to populate a menu of icons
3. There are many icons available if you scroll / slide down the icon menu
4. A selected item e.g. a Disabled Badge is instantly placed on the sheet



## 5. Note a Graphics Tab appears in the Top Menu

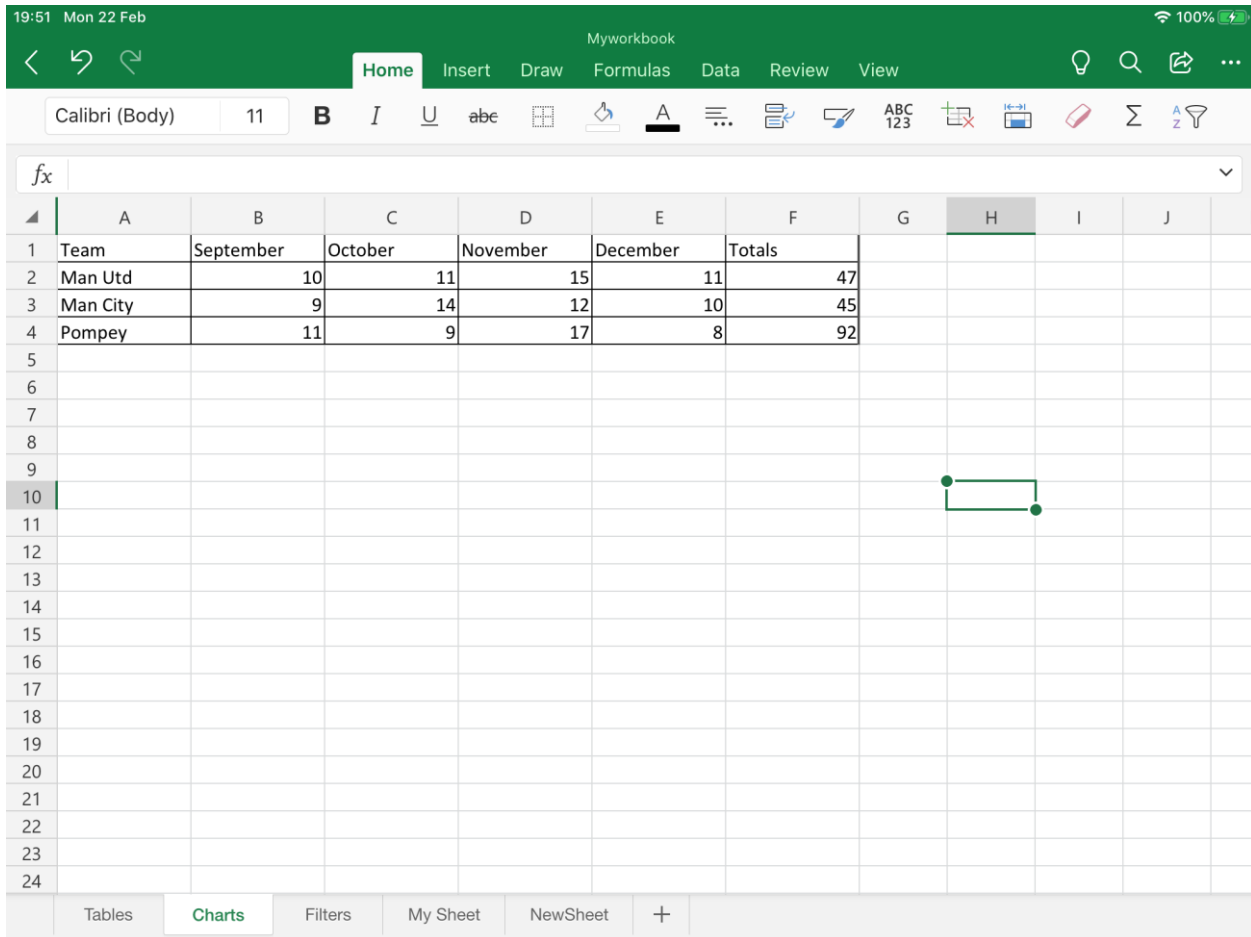


6. The Graphic Tabs menu also comes with a variety of options such as Alt Text, Crop, Fill, Outline and more. Note now our screen has a number of graphics objects the options Forwards and Backwards have become enabled
7. This allows us to layer shapes, text boxes and photos in front of or behind each other (all very fascinating for a spreadsheet)
8. Here we selected Graphics Fill which reveals a palette of colours to choose from

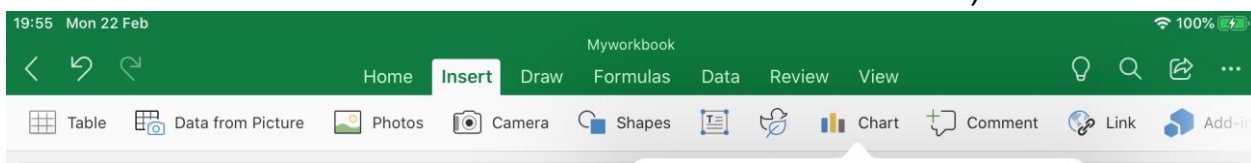


# Inserting and Editing Charts/Graphs

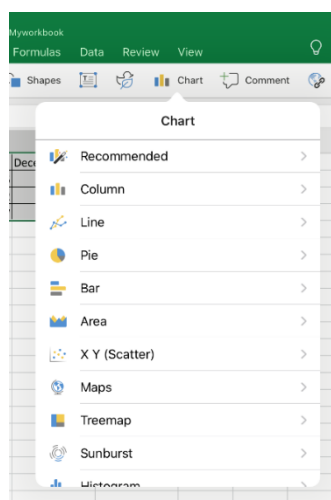
Select the range of data we wish to generate a chart of table from



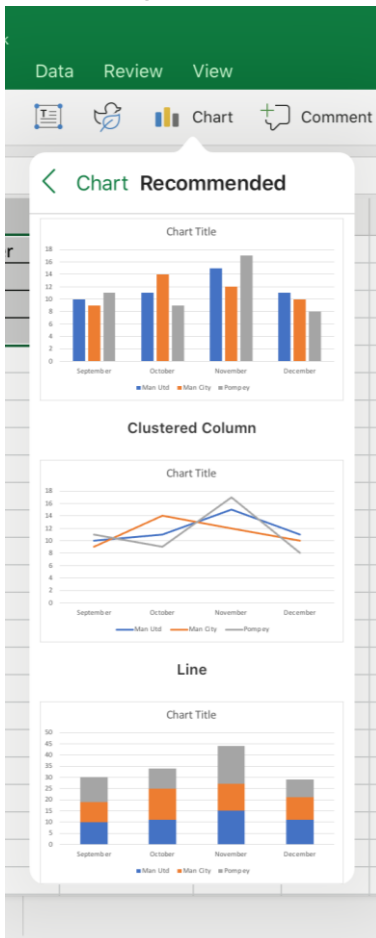
1. From The Top Menu → Insert Bar → Select / tap the Chart icon (a series of 3 vertical bars with the word Chart next to it)



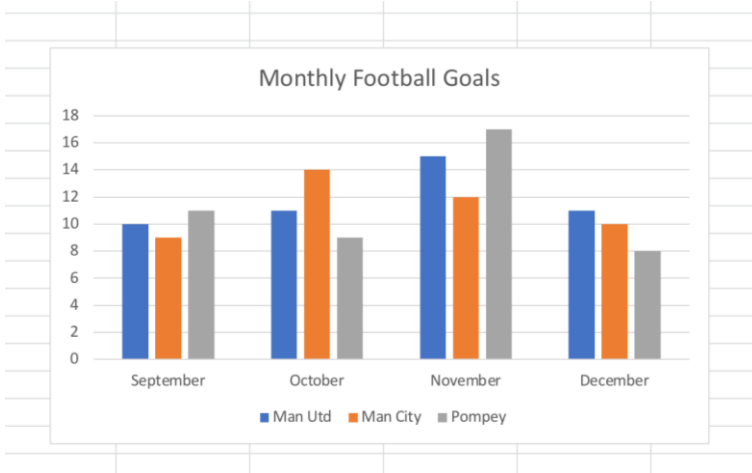
2. From the Chart drop down menu there are many options to try out



### 3. E.g. recommended

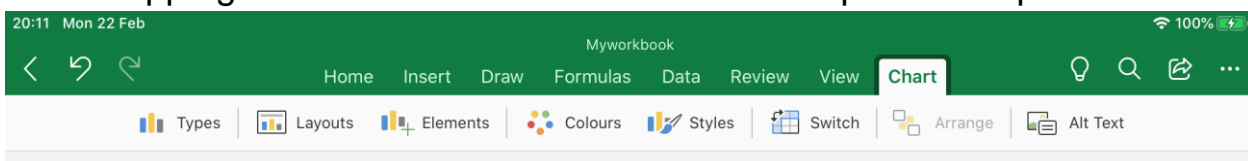


### 4. The chart is placed on your sheet

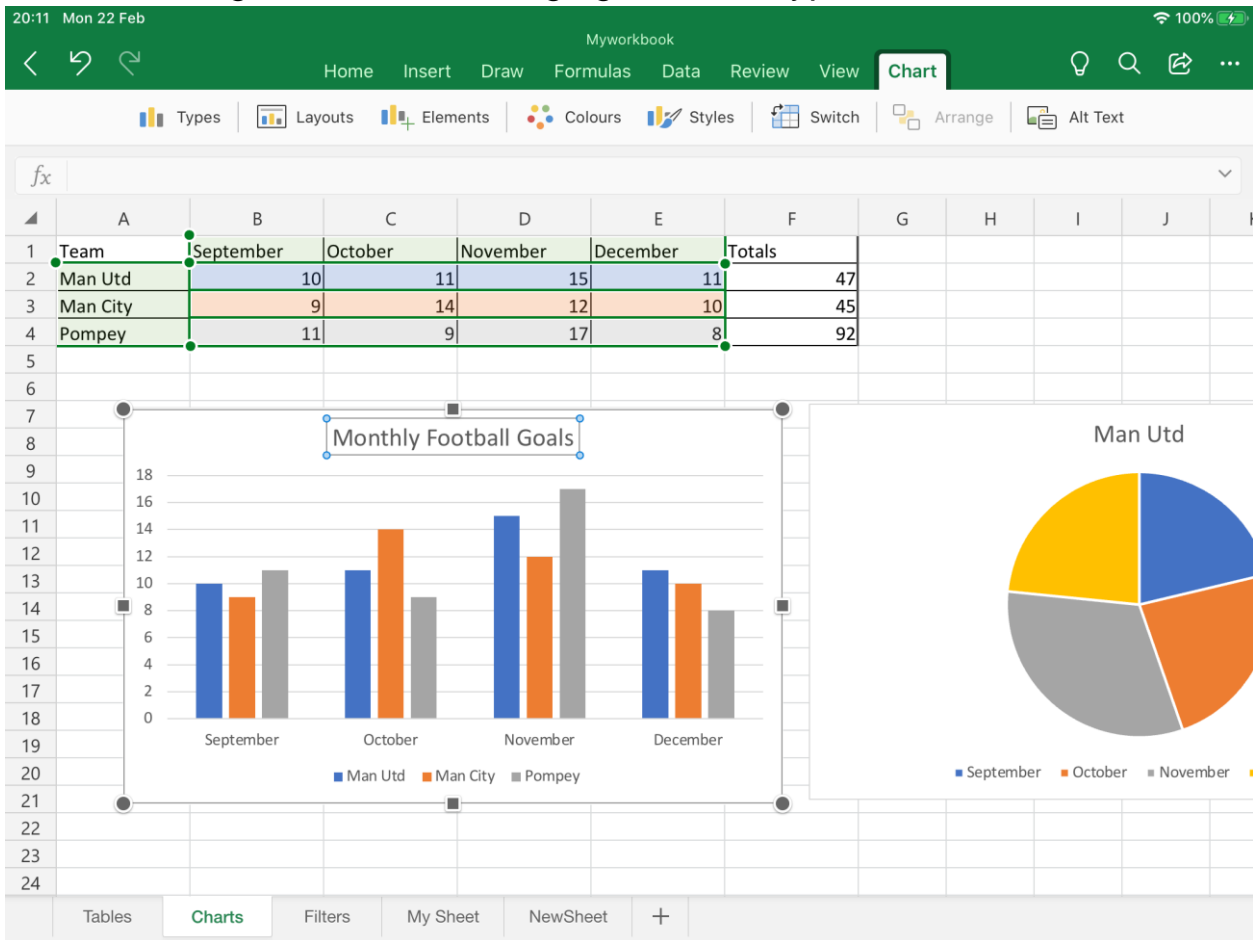


### 5. You can tap on it to move it

### 6. Tapping on a chart also reveals the Chart Tap in the Top Menu



7. From the Chart Menu you can make a number of changes to your chart, including colours and changing the chart type



8. To edit the generated Title of the chart long tap the title and the edit keypad appears



19:51 Mon 22 Feb Myworkbook 100%

Home Insert Draw Formulas Data Review View

Calibri (Body) 11 B I U abc A ABC 123

	A	B	C	D	E	F	G	H	I	J
1	Team	September	October	November	December	Totals				
2	Man Utd	10	11	15	11	47				
3	Man City	9	14	12	10	45				
4	Pompey	11	9	17	8	92				
5										
6										
7										
8										
9										
10										
11										
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13										
14										
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24										

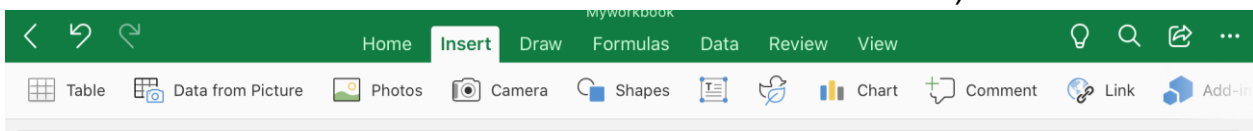
Tables Charts Filters My Sheet NewSheet +

## Adding Hyperlinks

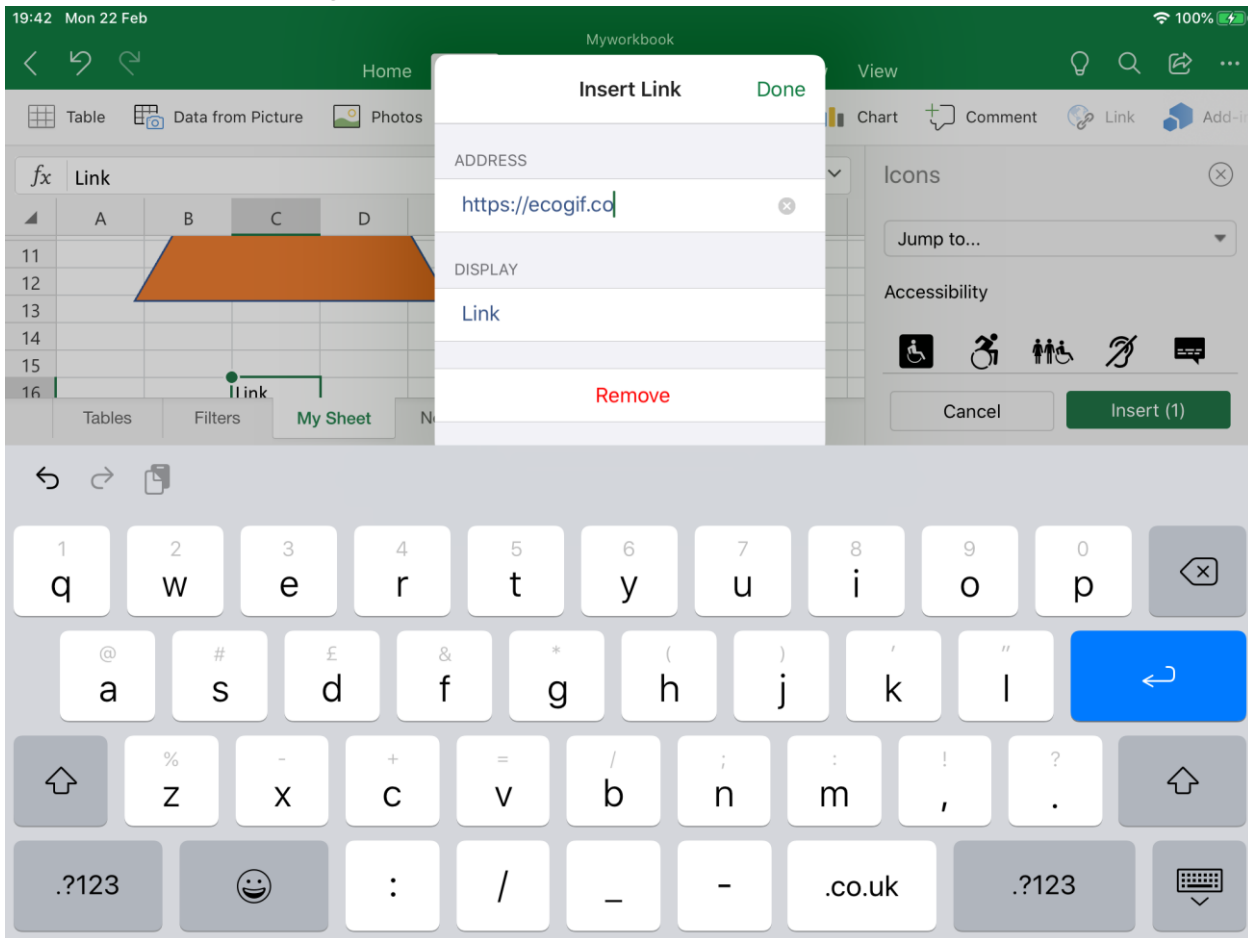
Link text to something on the web, this is called a hyperlink.

1. Select the text to turn into a link

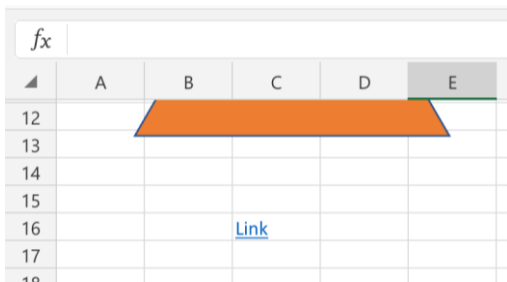
2. From the Top Menu → Insert Bar → Select the Link icon (a planet with a small chain on it and the word Link next to it)



3. Add the url e.g. <http://www.mywebsite.com> and tap done

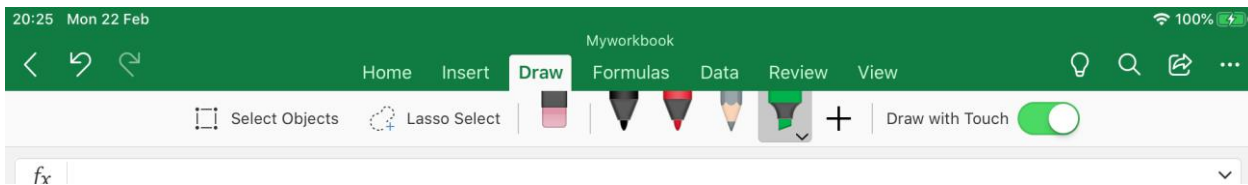


4. The result

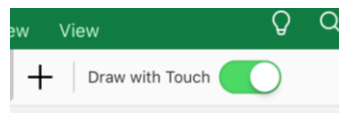
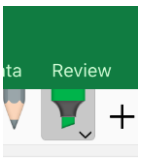


## Drawing (Apple Pencil or Finger)

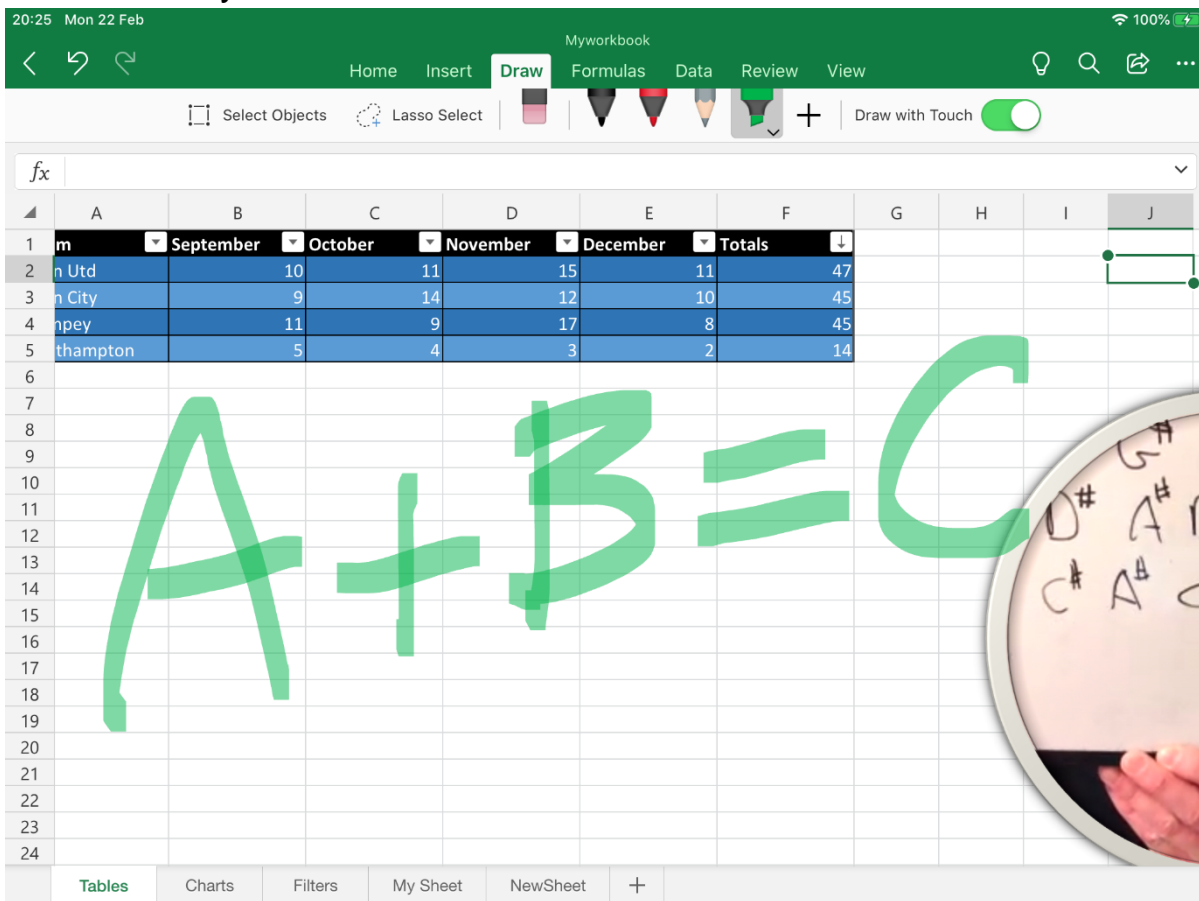
1. From the Top Menu → select the Draw Tab There is a selection of Draw tools



2. For example tap select the marker and change colour to green by holding down the marker tab



3. Enable the “Draw with Touch” setting by tapping or sliding bar
4. Draw by hand on the sheet

A screenshot of the Microsoft Excel mobile app interface showing a spreadsheet. The spreadsheet has columns for months (September, October, November, December) and a 'Totals' column. The data is as follows:

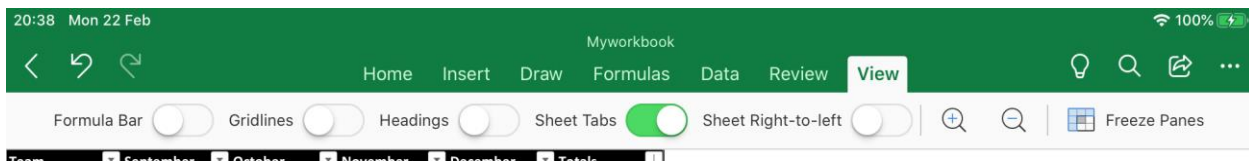
	September	October	November	December	Totals
Manchester Utd	10	11	15	11	47
Manchester City	9	14	12	10	45
Manchester City	11	9	17	8	45
Manchester City	5	4	3	2	14

Below the spreadsheet, the equation  $A + B = C$  is drawn in green. A circular inset shows a hand drawing the equation on a whiteboard.

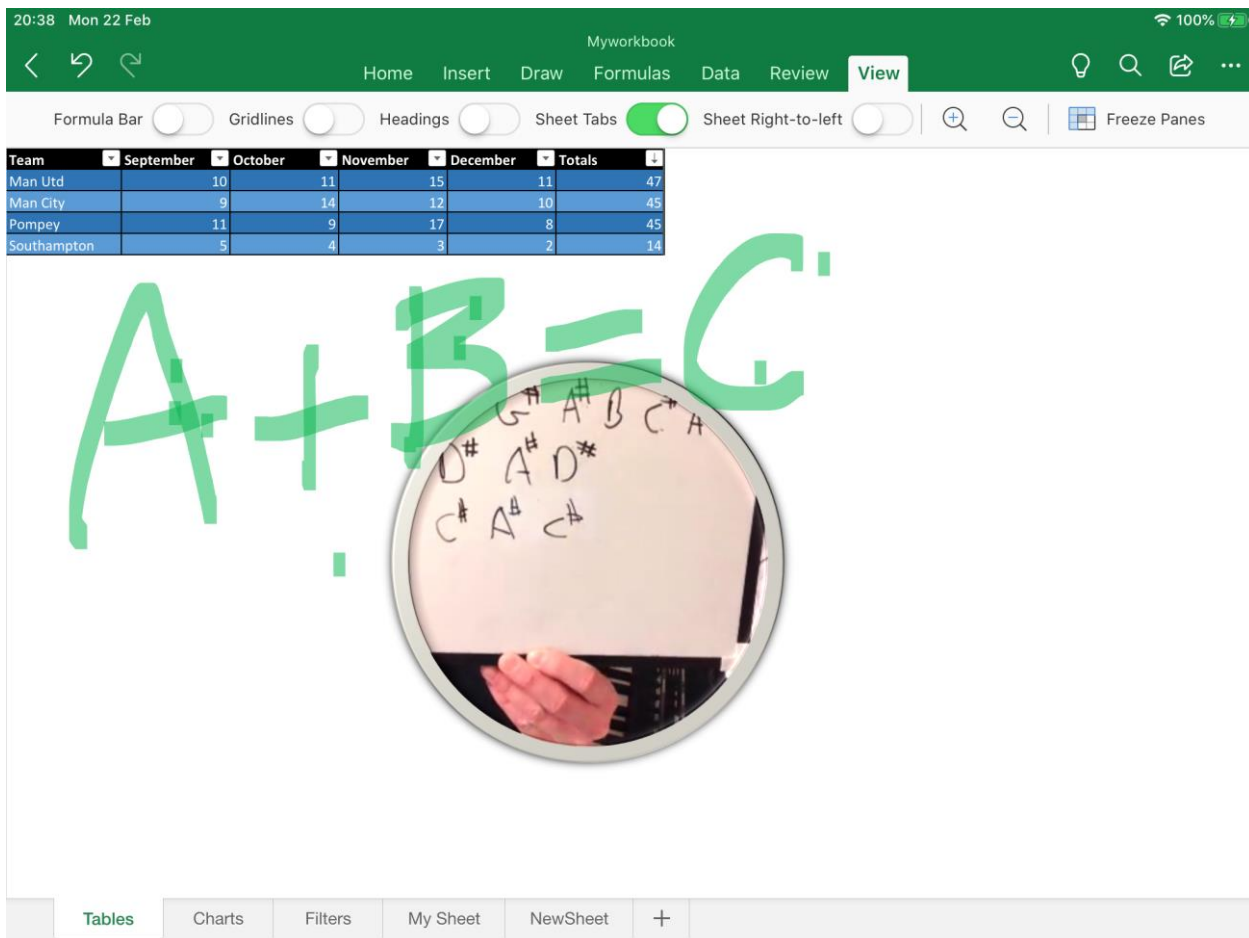
5. The sheet is still functional so you can continue to type in the cells

## View Menu: Formula Bar, Gridlines, Headings, Sheet Tabs, Sheet Right-to-Left

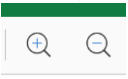
The View Tab Menu (a tab from the Top Menu) allows us to make changes to our sheet which may be useful for presentation



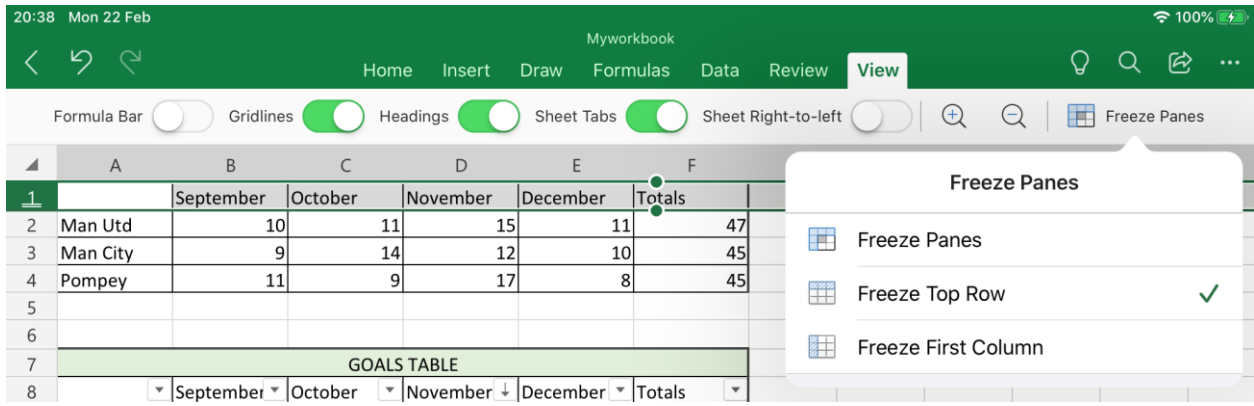
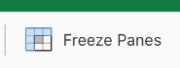
Here various settings have been toggled off to improve the presentation of our efforts including; Formula Bar, Gridlines, Headings



The **magnifying glass +** and **magnifying glass -** will zoom in and zoom out



**Freeze panes** are used to lock a column or row in place. This feature is used for sheets with lots of data and it is important to freeze or keep the information about the data in particular rows or columns



Here we see the rows passing under the frozen header (our Top Row from the previous step)

	A	B	C	D	E	F
1		September	October	November	December	Totals
9	Pompey	11	9	17	8	45
10	Man Utd	10	11	15	11	47
11	Man City	9	14	12	10	45
12						

## Search

### Search in the current worksheet - default

1. From the Top Menu towards the right-hand side, tap the Magnifying Glass




## 2. Type in the word or number you would like to find

The screenshot shows a mobile spreadsheet application interface. At the top, there is a search bar containing the text 'man utd'. Below the search bar, a keyboard is visible with the letters 'q', 'w', 'e', 'r', 't', 'y', 'u', 'i', 'o', 'p' highlighted in white, indicating they have been typed into the search bar. The spreadsheet data is visible in the background, showing a table with columns for months (September, October, November, December) and a 'Totals' column. The rows list 'Man Utd', 'Man City', and 'Pompey' with their respective goal counts. A 'GOALS TABLE' section is also visible below the main data table.

	A	B	C	D	E	F	G	H	I	J	K	L	
1		September	October	November	December	Totals							
2	Man Utd	10	11	15	11	47							
3	Man City	9	14	12	10	45							
4	Pompey	11	9	17	8	45							
5													
6													
7	GOALS TABLE												
8		September	October	November	December	Totals							
9	Pompey	11	9	17	8	45							
10	Man Utd	10	11	15	11	47							
11	Man City	9	14	12	10	45							

3. The information you have searched for is highlighted. If you hit return, this will take you to the next place in your worksheet where you will find the information.

4. You can also use the left and right hand arrows  at the top right hand corner

This screenshot shows the same spreadsheet application as above, but with the search results highlighted. The cells containing 'Man Utd', 'Man City', and 'Pompey' in the first column of the main table are highlighted in light green. The 'GOALS TABLE' section below is also visible, with its first column highlighted in light green. The search bar at the top still contains 'man utd'.

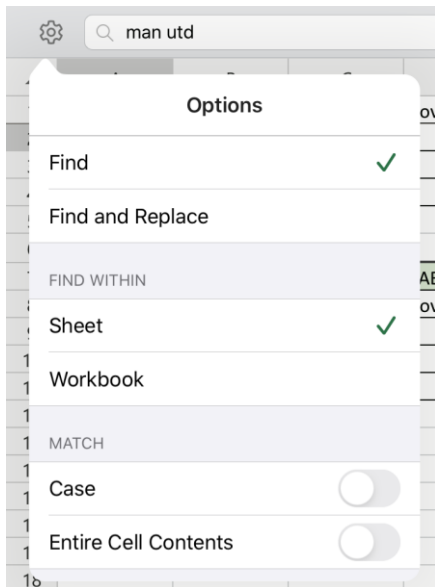
	A	B	C	D	E	F	G	H	I	J	K	L	
1		September	October	November	December	Totals							
2	Man Utd	10	11	15	11	47							
3	Man City	9	14	12	10	45							
4	Pompey	11	9	17	8	45							
5													
6													
7	GOALS TABLE												
8		September	October	November	December	Totals							
9	Pompey	11	9	17	8	45							
10	Man Utd	10	11	15	11	47							
11	Man City	9	14	12	10	45							

## Search in the workbook (all worksheets)

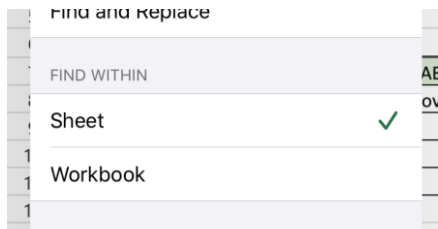
1. Tap the search settings icon top left



2. Tap Find and Replace



## Select Workbook



## Help

The Top Menu does not have a help button or icon

This is the help icon



The prompt “Tell me what you want to do” will appear

Type in what you need e.g. 'download my sheet'

Cancel

Tell me what you want to do

	A	B	C	D	E	F	G	H	I	J	K	L
1		September	October	November	December	Totals						

Cancel

download my sheet

	A	B	C	D	E	F	G	H	I	J	K	L
1		September	October	November	December	Totals						
2	Man Utd	10	11	15	11	47						
3	Man City	9	14	12	10	45						
4	Pompey	11	9	17	8	45						
5												
6												

Further information and instructions can be found if you search for help, include 'iPad excel app' in your search.

## Lesson 5: Completing Work in a PDF

### Outcome

The pupil can complete fields of a document in a PDF writer app which they have scanned.

### Preparation

You will need a clear and decluttered worksheet at the pupil's current academic level which is motivating to the pupil and/or linked to a topic. You will also need a suitable PDF writer app i.e. Smart Forms and a document scanner app i.e. Genius Scan.

### Links to Previous Learning

Continue to provide opportunities to develop speed and accuracy in typing letters, digits and symbols.

Ensure that the pupil is able to take clear photos of the whole of an object before completing the entirety of this lesson (See Unit 5a, Lesson 2).

### Key vocabulary

PDF writer app, fields

### Activity

Introduce a PDF writer as an alternative method of completing worksheet-based recording. Provide backwards chaining in order to complete fields on the PDF using typing tools. Gradually provide work on a PDF writing app in a less predictable order. Model and provide guidance in how to increase the text font. Once the pupil is confident in typing into the fields, model how to scan worksheets using a scanning app and then upload them to the now familiar PDF

writing app. Encourage the pupil to complete the steps required in order to scan a document, upload it into the PDF writer app before completing their work.

### **Tailor it!**

- Encourage the pupil to enlarge the text size so that it is comfortable for them to read.
- Apply Zoom including Follow Focus.
- Tailor the worksheet to match the pupil's ability to scan and locate information i.e. present print and/or images horizontally with adequate spacing.
- Introduce functions within the PDF writing app which will be the most useful to the pupil i.e. the pen mode to draw with alongside text or a highlighter to highlight key words.

### **Let's Apply!**

- Support the pupil to generalise their typing skills and use of scanning and PDF writing apps within the classroom environment as an alternative and quicker way of producing their work.
- Gradually increase the complexity of the worksheet.
- Encourage the pupil to explore other options in the PDF writer app i.e. pen mode and identify how they could use this within their learning environment.
- Explore a range of other apps which can be used to record work, identifying key apps that can be used for the pupil to record their own work rather than having to rely on others. Demonstrate using the screenshot tool as a way of evidencing work if appropriate.

### **Think SMART!**

**S** – What kind of document do you expect the pupil to complete? Which apps do you expect the pupil to use?

**M** – How many steps to scan and type on a document do you expect the pupil to complete? How many functions do you expect them to use?

**A** - How much scaffolding does the pupil need to achieve the outcome?

**R** – Will you expect the pupil to be able to interact with both the scanner app and the PDF writer app or will these need to be taught separately to begin with? Are their typing skills at a sufficient level to use the typing tools or will they need to use the Dictation tool?

**T** – Will the pupil be able to complete all steps in order to scan the document, upload to a PDF writing app and engage in this in one lesson or will these steps need to be taught and practiced over multiple lessons?

## **References**

iPad User Guide. Available at: [iPad User Guide - Apple Support](#) (available 17.2.201)

Koenig A. J. and Holbrook M. C (2000) Planning Instruction in Unique Skills. In: A.J. Koenig and M. Cay Holbrook (Eds) *Foundations of Education Second Edition: Volume II Instructional Strategies for Teaching Children and Youths with Visual Impairments*. AFB Press: New York.



# Appendices A – Lesson Plan Examples

## LINT 5 Minute Lesson Plan – iPad

Date: 12.2.20

- Logan has been introduced to a single finger double and triple tap gesture as well as a tap and hold.
- Logan has identified one difference between locking and turning the power off and can un/lock the screen on most occasions.
- Logan has used a Bluetooth keyboard to type a sentence.
- Logan has used Play Button to record three sentences.
- Logan has begun to use the Zoom menu to adjust the magnification and pan around the screen.

By the end of the lesson Logan will be able to:

1. Activate Speak Selection to read at least 3 words from a very accessible text.
2. Successfully zoom and then pan around a singular magnified image in colour to locate at least 4/5 of it's multiple features.
3. Successfully apply a tap and hold gesture for up to 6 seconds to turn the iPad on and off on request on at least 4/5 occasions.
4. Type at least one sentence using a Bluetooth keyboard within Notes.
5. Record at least two events from a traditional story using Our Story for iPad.

Produce a single, double and triple finger single tap and tap and hold on request in order to produce an effect.

- Single finger tap and hold gesture
- Zoom
- Notes
- Our Story
- Record
- Speak Selection

- iPad
- 'iloveFireworks' app
- Notes
- A more complex singular image
- Our Story for iPad
- Zoom controller
- Images of familiar traditional stories
- Electronic texts

1. Introduce Speak Selection, modelling how to activate it within iBooks and discuss when this could be useful. Provide graduated verbal guidance for Logan to activate Speak Selection to read out challenging words.
2. Revise the function of Zoom and how to select, open and magnify the screen using the Zoom menu before panning around the screen in order to locate features of a motivating singular image. Challenge Logan to pan around this image in order to find features on request.
3. Revise how to turn the iPad on and off. Provide graduated verbal prompting to encourage Logan to turn the iPad on and off, using counting strategies in order to keep his fingers pressed on the power button for a sufficient amount of time in association with a tap and hold gesture.
4. Revise using a Bluetooth keyboard as an alternative way to record and model how to locate digits. Challenge Logan to locate keys and digits in order to produce at least 1 mixed sentence.
5. Revise Our Story for iPad, modelling how to record a sentence to match an image from a traditional story using 'Think, Say, Record'. Challenge Logan to record a sentence to match each image using this app.

What next?

Homework/  
In-Class  
Consolidation

1. How many words could you have read out?
2. How many parts could you find?
3. Thumbs up!
4. How many sentences could you type with letters and digits?
5. How many sentences could you record?

1/2/3/4. Graduated verbal guidance  
5. High level of verbal guidance  
Towards Mastery

## LINT 5 Minute Lesson Plan – iPad

Date: 10.7.19

By the end of the lesson Ruby will be able to:

1. Clearly record at least 1 sentence using the in-built dictation tool.
2. Switch between at least 2 open apps, successfully closing them on her first attempt on at least 3/5 occasions.
3. Successfully take a photo of text using computer font size 8, apply Zoom and smoothly move down to the next line on 4/5 occasions.
4. Complete at least 3 rows within the first lesson of Doorway Online with at least 85% accuracy.
5. Invert the screen using the Zoom menu on at least 3/5 occasions on request.

- record - Zoom menu - pan  
- touch-type - Dictation - along - switch way

Challenge Ruby to complete all taught gestures. Apply a double-tap gesture to the Home Button.

- On her last attempt, Ruby has completed 3 lines on Doorway Online with 80% accuracy.
- Ruby has can smoothly pan along a line of text from left to right go down to the next line with well-spaced text.
- Ruby has recorded 3 self-generated sentences using Videolicious.
- Ruby can close apps.
- Ruby is very familiar with the Zoom menu.

- iPad
- I Love Fireworks app
- Videolicious
- Text using computer font size 8
- touch-typing programme Doorway Online
- motivating images

1. Model activating the Dictation tool in order to record agreed words within Notes. Provide graduated guidance to encourage Ruby to record singular words. Extend to simple sentences.
2. Introduce the app switch feature of the iPad, modelling how this can be applied in class to quickly access a range of open apps i.e. gaining info from the internet to apply within a text document. Provide graduated verbal guidance to encourage Ruby to switch between apps.
3. Display text using font size 8 and model take a photo before applying Zoom to pan along the text. Provide graduated verbal prompting to encourage Ruby to take a photo of the text, apply Zoom and pan along each line of text from left to right before moving down to the next line.
4. Continue the first lesson within the touch-typing programme Doorway Online, encouraging Ruby to locate the keys using the correct fingers.
5. Model using the Zoom menu in order to invert the screen. Challenge Ruby to explore images of object using the inverted screen, exploring their features.

1/2/5. Graduated verbal guidance  
3/4. Graduated verbal prompting  
Towards Mastery

What next?

Homework/  
In-Class  
Consolidation

1. How many sentences did you record?
- 2/5. Thumbs up!
3. How many sentences could you read?
4. How many rows could you complete?

# Appendices B – Siri

## What is Siri

- Siri is a built-in, voice-controlled personal assistant available on the iPad. You can ask Siri questions, tell Siri to show you something or issue commands.

## How to set up Siri



- Go into **Settings**
- Scroll down the left-hand column and tap on **Siri & Search**
- To summon Siri with your voice: Turn on **Listen for “Hey Siri.”**
- To summon Siri with a button: Turn on **Press Home for Siri** (on an iPad with a Home button) or **Press Top Button for Siri** (on other iPad models).

## Summon Siri with your voice

- If you summon Siri with your voice, Siri responds out loud.
- Say “Hey Siri,” then ask Siri a question or to do a task for you.
- To ask Siri another question or to do another task, say “Hey



Siri” again or tap .

- To prevent iPad from responding to “Hey Siri,” place your iPad face down, or:

Go to **Settings**

Tap on **Siri & Search**

Turn off Listen for “Hey Siri.”


## Summon Siri with a button


- On an iPad with a Home button: Press and hold the button.
- On other iPad models: Press and hold the top button.
- When Siri appears, ask Siri a question or to do a task for you.



- To ask Siri another question or to do another task, tap

## If Siri does not understand you

- Rephrase your request: Tap  and ask the question in a different way.

- Spell out part of your request: Tap , then repeat your request by spelling out any words that Siri did not understand.
- Change a message before sending it: Say “Change it”.
- Edit your request with a text: If you see your request onscreen, you can edit it. Tap the request, then use the onscreen keyboard.

## Type instead of speaking to Siri

- Go to **Settings**
- Scroll down the left-hand column and tap on **Accessibility**
- Tap on **Siri**
- Turn on **Type to Siri**
- To make a request, summon Siri, then use the keyboard and text field to ask Siri a question or to do a task for you.

## Find out what Siri can do on an iPad

- You can use Siri to get information and perform tasks.
- Find answers to questions e.g., “Hey Siri, what is a cat?”
- Perform tasks with apps e.g., to create an event in your calendar say “Hey Siri, meet with my English teacher at 10am”
- Send and reply to messages e.g., “Hey Siri, send a message to my Maths teacher”.

## Tell Siri about yourself on an iPad

- If you tell Siri about yourself—including things like your home and work addresses, and your relationships—you can get a personalised service and e.g., say “Send a message to my mum”.
- Tell Siri who you are.



- Open the Contacts app and fill out your contact information.
- Go to **Settings – Siri and Search – My information** – then tap your name.
- Tell Siri how to say your name e.g., say “Hey Siri, learn to pronounce my name”.

## Add Siri Shortcuts on iPad

- Add a suggested shortcut – tap Add to Siri when you see a suggestion for a shortcut, then follow the onscreen 6 to record a phrase of your choice that performs the shortcut.
- Use a shortcut - Summon Siri, then speak your phrase for the shortcut.

## Turn off shortcut suggestions

- Based on your routines, Siri may suggest shortcuts on the Home screen, Lock screen and when you start a search
- To turn off shortcuts: Go to **Settings – Siri and Search** - tap the app, then turn off Suggest Shortcuts for App for the Home Screen, the Lock Screen, or both.

## About Siri suggestions on an iPad

- Siri makes suggestions for what you might want to do next, such as confirm an appointment or send an email, based on your routines and how you use your apps. For example, Siri might make suggestions when you create an email and events, type, search in Safari, confirm an appointment etc.

## Change Siri settings on an iPad

- Change when Siri responds. Go to **Settings - Siri & Search**, then do any of the following:
  - *Prevent Siri from responding to the voice command “Hey Siri”*: Turn off Listen for “Hey Siri.”
  - *Prevent Siri from responding to the Home button or the top button*: Turn off Press Home for Siri (on an iPad with a Home button) or Press Top Button for Siri (on other iPad models).
  - *Prevent access to Siri when iPad is locked*: Turn off Allow Siri When Locked.
  - *Change the language Siri responds to*: Tap Language, then select a new language.
  - You can also summon Siri by typing (see **Type instead of speaking to Siri**).
- Change how Siri responds. Go to **Settings - Siri & Search**, then do any of the following:
  - *Change the voice for Siri*: (not available in all languages) Tap Siri Voice, then choose a male or female voice for Siri or change the accent.
  - *Change when Siri provides voice responses*: Tap Siri Responses, then choose an option below Spoken Responses.
  - *Always see the response from Siri onscreen*: Tap Siri Responses, then turn on Always Show Siri Captions.
  - *See your request onscreen*: Tap Siri Responses, then turn on Always Show Speech.
- Hide apps when you summon Siri. If you do not want the active app to remain visible behind Siri, go to **Settings - Accessibility - Siri**, then turn off Show Apps Behind Siri.
- Change where Siri Suggestions appear. Go to **Settings - Siri & Search**, then do any of the following:
  - *Suggestions while searching*
  - *Suggestions on Lock Screen*
  - *Suggestions on Home Screen*
  - *Suggestions when sharing*
- Change Siri settings for a specific app:
  - You can change the Siri Suggestions and Siri Shortcuts settings for any app.
  - Go to **Settings - Siri & Search**, then select an app.

- Adjust the Siri voice volume by saying e.g., “Turn up the volume” or “Turn down the volume.” Or use the volume buttons.
- Retrain Siri with your voice. Go to **Settings - Siri & Search**, turn off **Listen for “Hey Siri,”** then turn on **Listen for “Hey Siri”** again.
- To change Siri accessibility settings, see following link <https://support.apple.com/en-gb/guide/ipad/ipade5045bb1/ipados>

# iPad Accessibility Skills

Siri	Progression		
Basic Skills	Introduce	Developing	Achieved
Summon Siri with your voice			
Summon Siri with a button			
If Siri does not understand you			
Type instead of speaking to Siri			
Intermediate Skills			
Find out what Siri can do on an iPad			
Tell Siri about yourself on an iPad			
Add Siri Shortcuts			
Turn off Shortcut Suggestions			
Advanced Skills			
Change Siri settings on an iPad			
Change when Siri responds			
Change how Siri responds			
Hide apps when you summon Siri			
Change where Siri Suggestions appear			
Change Siri settings for a specific app			

Adjust the Siri voice volume			
Retrain Siri with your voice			
Change Siri accessibility settings			

# Appendices C – Instructions on Screen-Mirroring Software

Screen-mirroring (or Conference) software enables a pupil to see what is displayed on the classroom Interactive Whiteboard (IWB) on their device. They can then, commonly, manipulate the image to make it easier to see, changing the colours, zooming in to make it bigger, annotating it with an Apple Pencil or saving it to a drive for further reference.

There are myriad screen sharing software options, each of which works slightly differently. It is common for schools to need to try more than one to find a software that fits. Most are free of charge, or relatively cheap.

Common conference software options include (but are not limited to) the following:

- join.me
- VNC
- Impero
- Team Viewer
- Nearpod
- Splashtop classroom
- DisplayNote

# Appendices D – Using the OneDrive App

## What is OneDrive

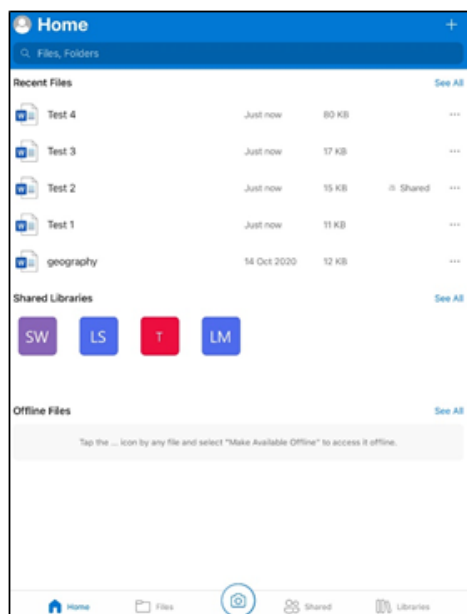
- OneDrive is the cloud storage service developed by Microsoft that allows you to store all your files and photos securely in one place, share and collaborate with others and then access them from anywhere.

## How to set up a OneDrive account

- If you have a Microsoft account, you already have a OneDrive account.
- Download the OneDrive app from the app store. If it is your first time, sign into OneDrive with your Microsoft account email address.
- You can also sign in from a web browser. Go to [onedrive.live.com](https://onedrive.live.com). When the sign in window appears, sign in with your Microsoft account email address and password.


## Home page layout explained

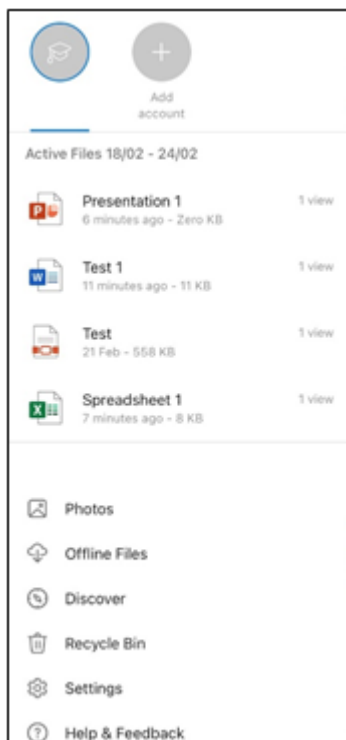
- The Home page should look similar to the diagram below with the Home tab highlighted on the toolbar at the bottom of the screen. Your list of recent files will appear on the screen.



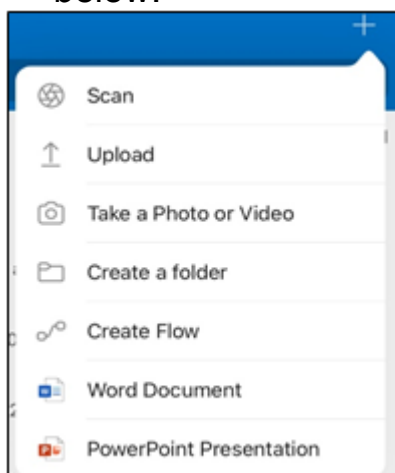
- The OneDrive features toolbar which is located at the bottom of the screen may vary. For example, if you have used Photos, it may appear here as well:




- When you are signed in, a Me icon  will appear in the top left corner next to Home. If you tap on this, a sub menu will appear with various options.

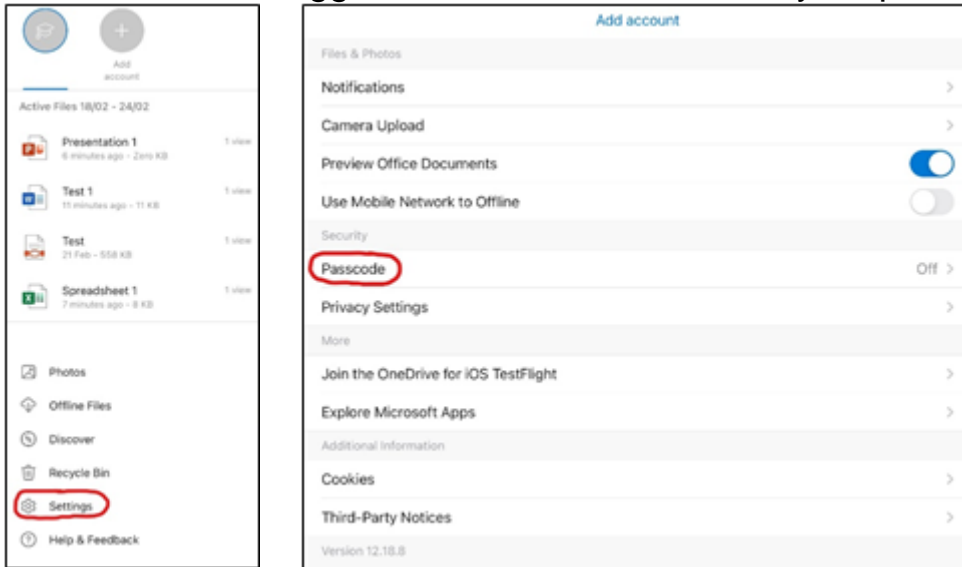


- The Add icon (plus sign) in the top right corner displays the menu below:



## Set a passcode

- You can set a four-digit passcode to prevent other users of your iOS device from accessing your OneDrive for work or school account. To do this, open the app, tap the Me icon, tap Settings , and then tap the Passcode toggle to turn it on and to enter your passcode.

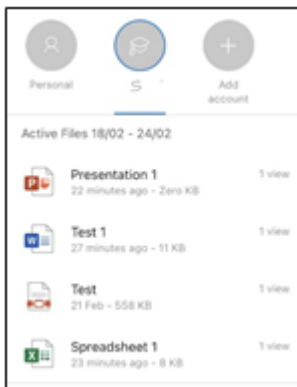


## Add an account

- You can add an account by tapping on the Me icon and then 'Add account' (grey circle icon with plus sign in the middle)

## Switch between accounts

- If you have more than one OneDrive account e.g., a school and personal, you can switch between the two by tapping on either icon. The school account is the middle icon below.

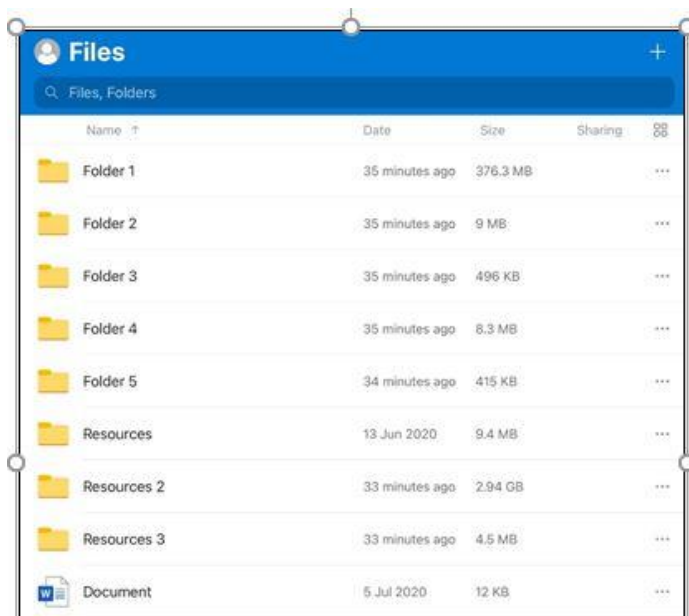


## Sign out of an account

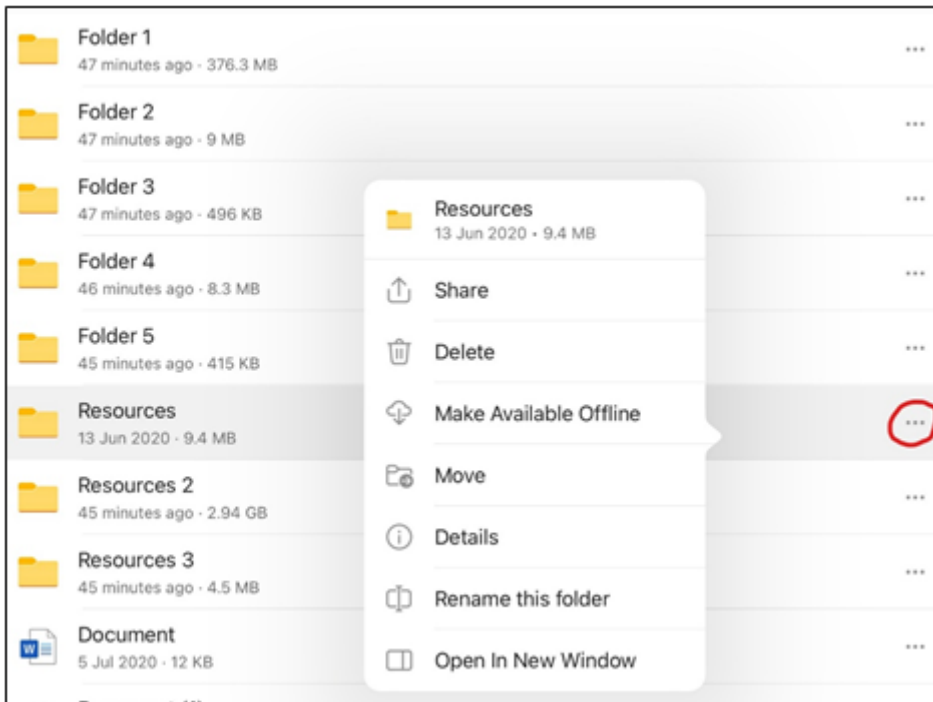
- To sign out of a OneDrive for home account or a OneDrive for work or school account, open the app, tap the Me icon, and select the account you want to sign out of.
- Once you have selected the account, tap Settings, go to Accounts (near the top), tap the Personal or the OneDrive for school/work account name and tap Sign out.

## Files tab

- Go to the Files page by tapping on the Files tab at the bottom of the screen, located in the features toolbar and your Files list will appear. The Files tab will also be highlighted.

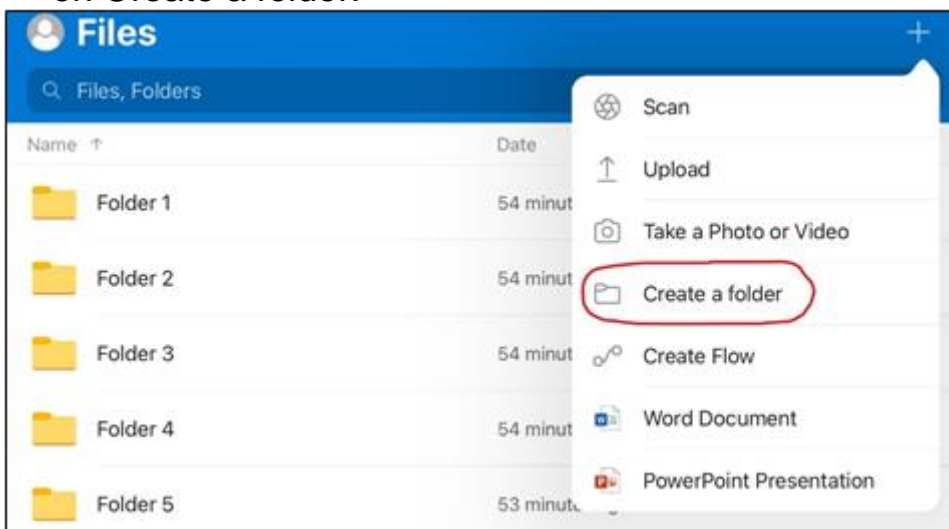


- Tap on the three dots next to each file or folder on the right-hand side of the screen. In the example below the Resources folder has been selected and options are chosen as required. If you select a file you will be given the option to edit or open in another app as well.

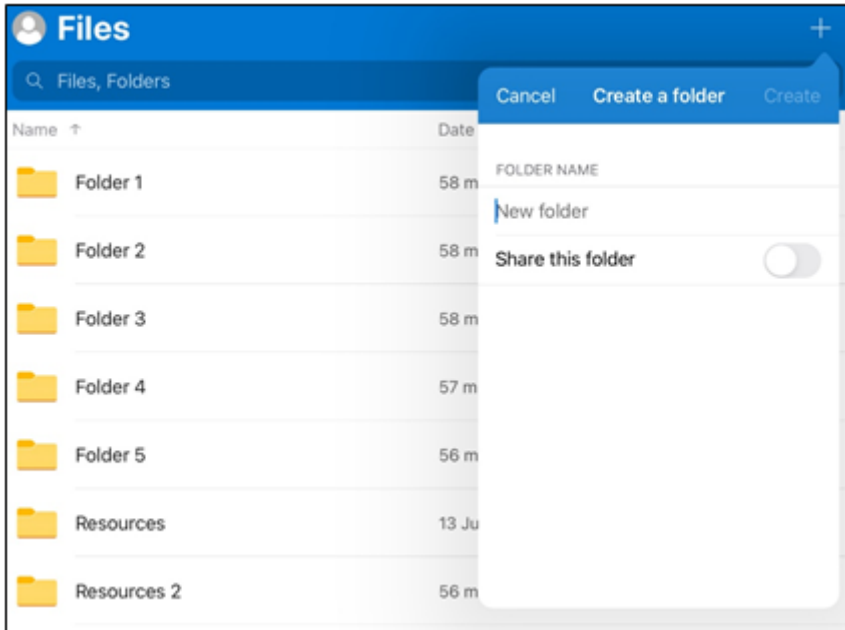


## Create a folder

- Tap on the Add icon in the top right corner and tap on Create a folder.

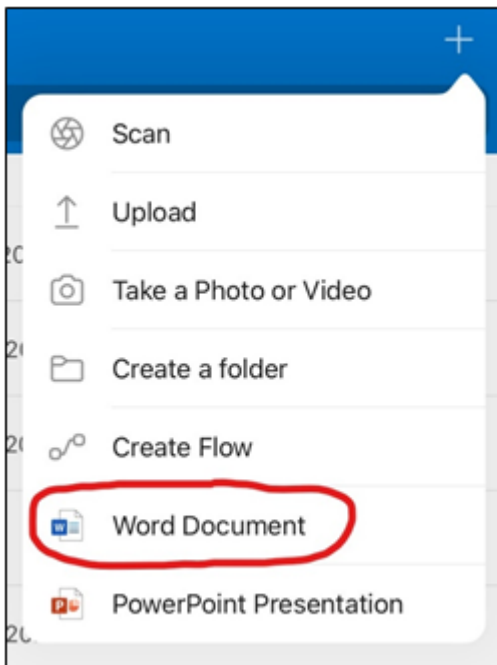


- You will now be able to create a folder. Type in the name of your folder where it says New folder and then tap on Create a folder.



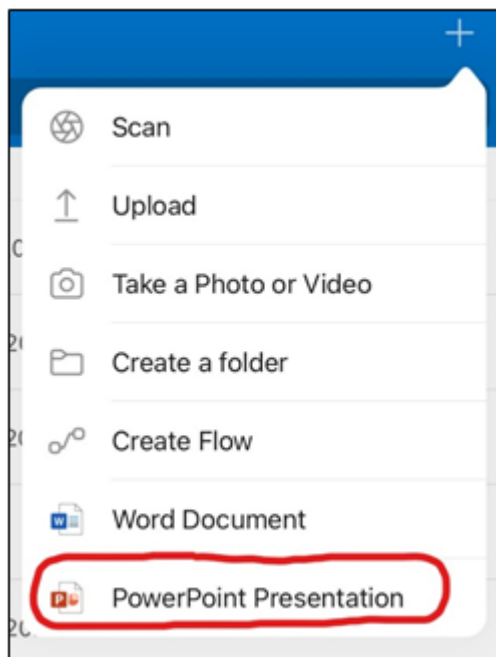
## Create a Word document

- If select Word Document, you will be directed to the Word app and a new document will open. Once you have finished your document, you will be given the option to save to your OneDrive account.



## Create a PowerPoint or Spreadsheet


- If you select PowerPoint presentation you will be directed to the PowerPoint app. You can create a PowerPoint and save it in OneDrive. If you have the option to select Excel then follow the same steps.



## Access a file or folder

- Tap on the icon/name.

## Find a file/folder

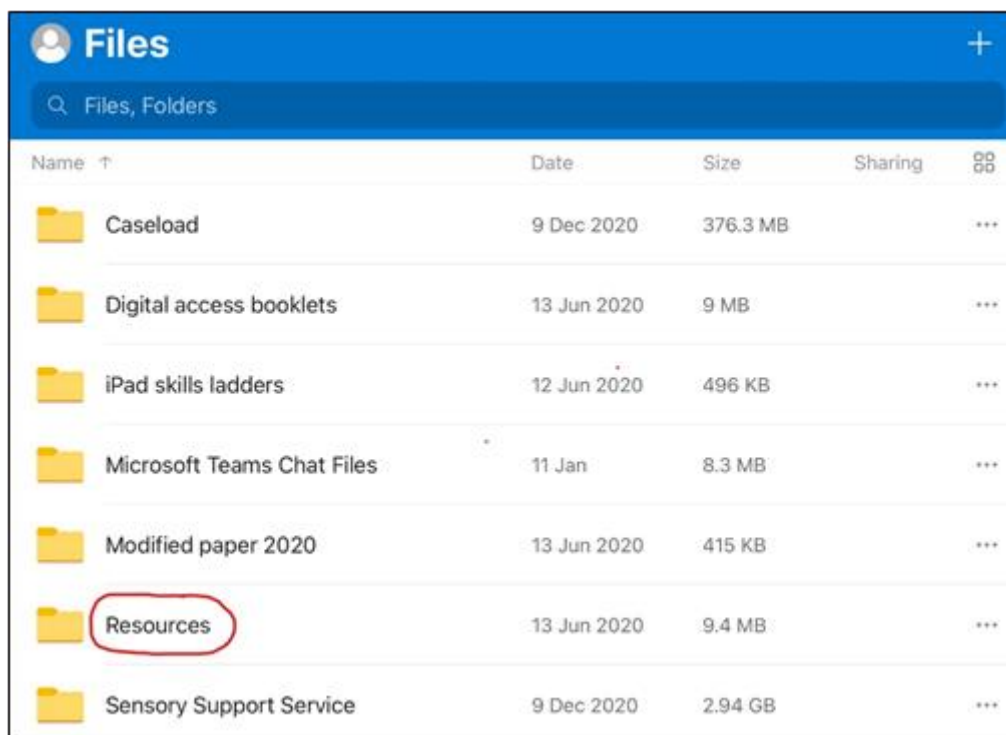
- You can find files/folders or search for text within them.
- At the top of the file view tap Search  in the top bar.
- Enter the name of the file/folder or text you want to search for.

## Change how files are sorted

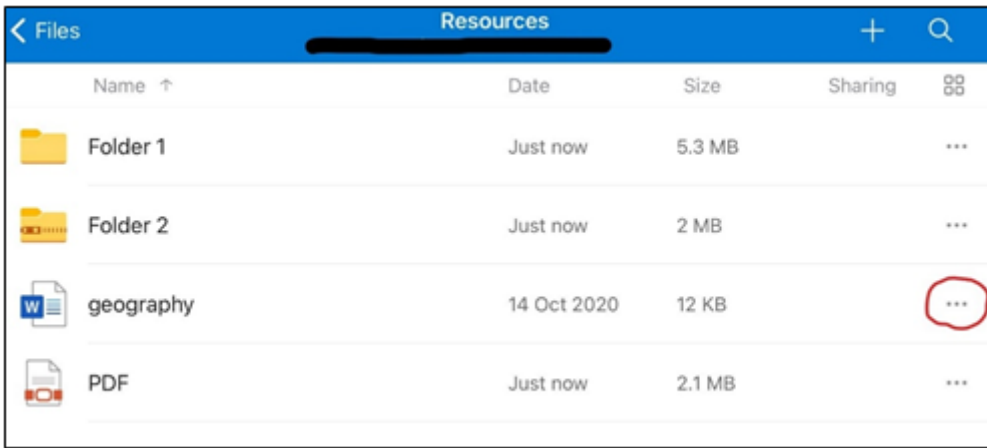
- Open the folder you want to sort, and then tap the arrow next to the current sort order, for example Sort by name (A to Z).
- Select how you want the files sorted. You can sort by name, date, or size.

## Move files/folders in and out of folders

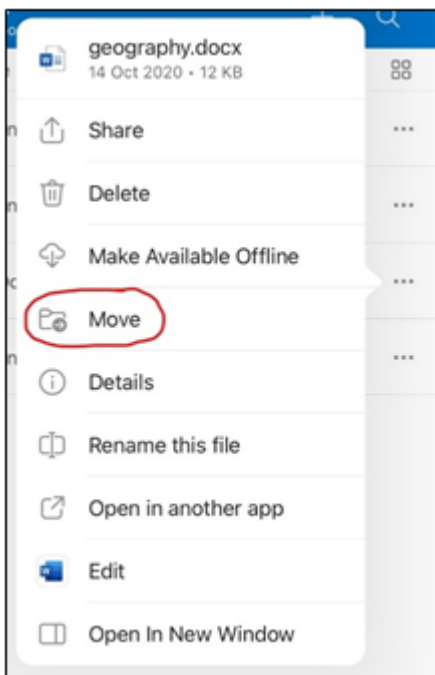
- You can move folders in and out of another folder, as well as individual files. Go to the Files tab to see your list of files and folders.
- Move a file/folder into another folder – select the file/folder you want to move elsewhere. Tap on the three dots next to it and select Move. Your folders list will appear as a sub menu. Tap on the folder you want your file/folder to move into.
- Move a file out of a folder – Tap on the name of the folder that your file is in. In the following example we will move the Geography file out of the Resources folder. In this example we will tap on Resources (tap where circled in red).



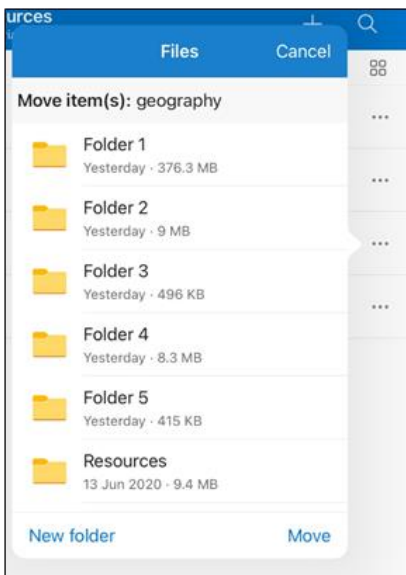
- You will be presented with the list of files and folders in Resources. Find the file/folder you want to move and tap on the three dots next to it. Sometimes the three dots do not appear straightaway. If this happens just come out of the folder and go straight back in. In this example we are moving the Geography file. We will tap on the three dots next to Geography (circled in red).



- You will then be presented with various options including moving the file. Tap on Move (circled in red).



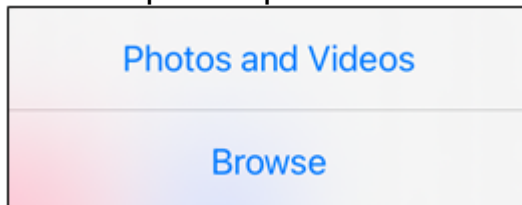
- A sub menu will then appear which contains a list of all available folders to move the Geography file into.



- If you just want to move the file out of the folder without transferring to another folder then select Move. If you want to transfer to another folder then select the folder first before tapping Move.

## Upload files and folders

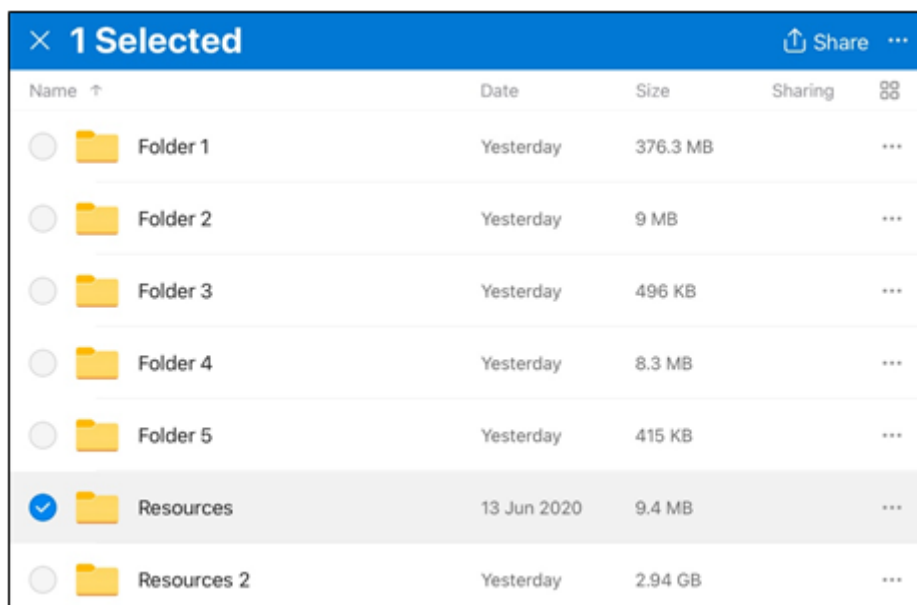
- Tap the Add icon **+** at the top right of the screen.
- Tap on 'Upload' and the icons below will appear on the screen:



- You can upload any photos or tap on Browse to access files on your device (in Files app).

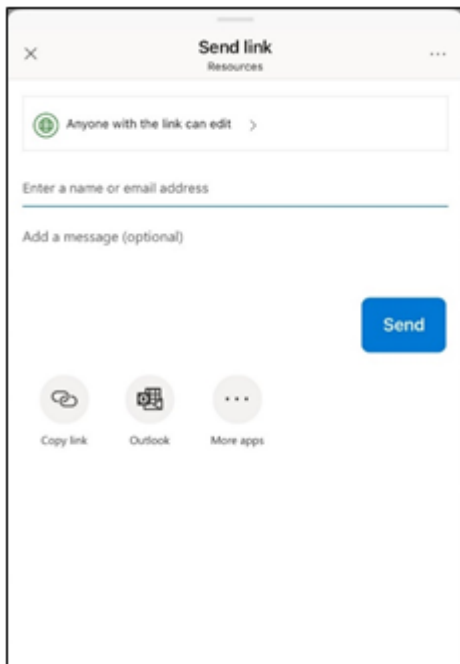
## Share files/folders

- In the Files page, select the file/folder you want to share. You can do this in two ways:
  - Select the file or folder you want to share. You need to press and hold to select it. Then tap on the Share icon in the top right corner.

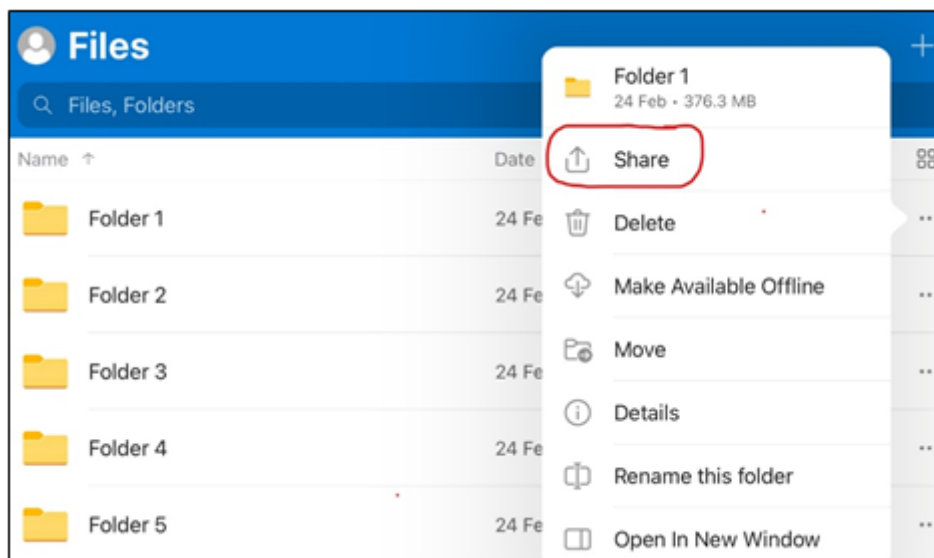


- Once you have selected Share, the 'Send link' sub menu will appear as shown in the following diagram. Type in the email

address of the person/people you want to share the file with. Add a message as required and press send.



- Another way to share is by tapping on the three dots next to your file/folder and choosing Share from the sub menu.



## Delete a file/folder

- In the Files tab tap on the three dots next to the file/folder
- Select Delete.

## Rename a file/folder

- In the Files tab tap on the three dots next to the file/folder
- Select Rename this folder.

## Make available offline

- In the Files tab tap on the three dots next to the file/folder
- Select Make Available Offline.


## View details of file/folder

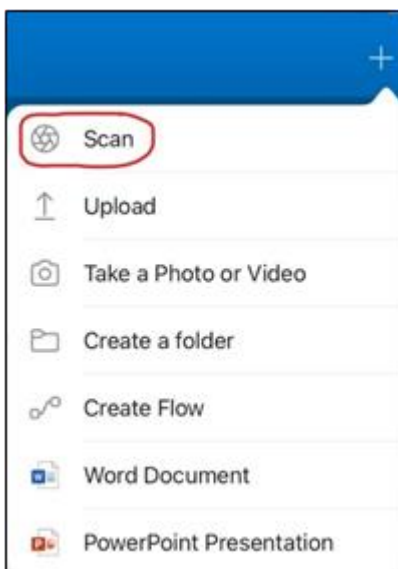
- In the Files tab tap on the three dots next to the file/folder
- Select Details.

## Open in new window

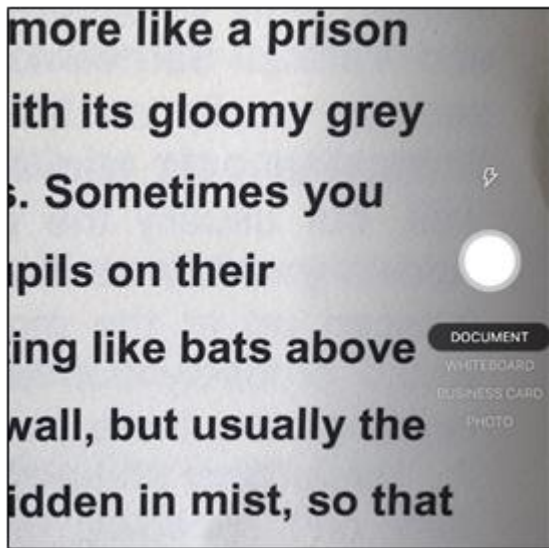
- In the Files tab tap on the three dots next to the file/folder
- Select Open in New Window.

## Scan a document, whiteboard, business card or photo

- Tap Scan  on the OneDrive features toolbar at the bottom of the screen. You can also tap the Add icon at the top of the screen, then tap Scan. (To exit out of Scan mode without scanning anything, just tap the 'x' in the upper left corner of your screen.)



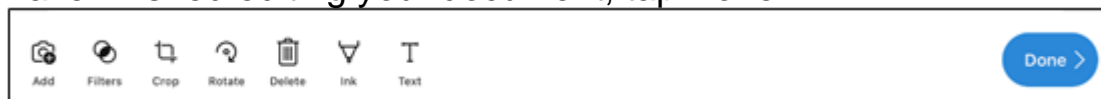
- If available, select the appropriate flash setting (on, off, automatic) by tapping the Flash icon, just above the white circle icon.



- Select either Whiteboard, Document, Business Card, or Photo, then tap the white circle icon to scan the item.

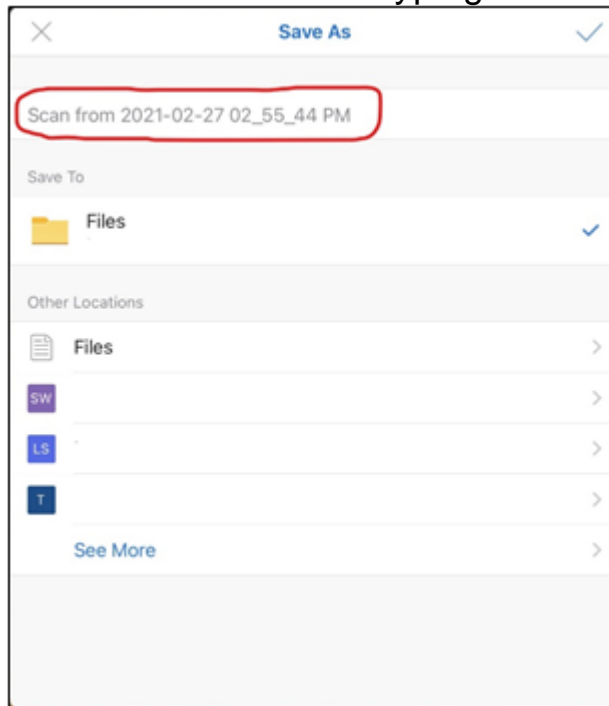
## Edit your scan

- Once you have scanned your item, you can crop it, rotate it, add text, or highlight part of it. (If you do not like the image, just press Cancel at the bottom left of the screen). If you are happy with the image press Confirm at the bottom right of the screen.
- Once confirmed you are presented with. Once scanned you can add filters, crop, rotate, delete, highlight or add text. These are all options at the bottom left of the screen. You can also add another page by pressing the Add icon, which is the first option, bottom left. Once you have finished editing your document, tap Done.

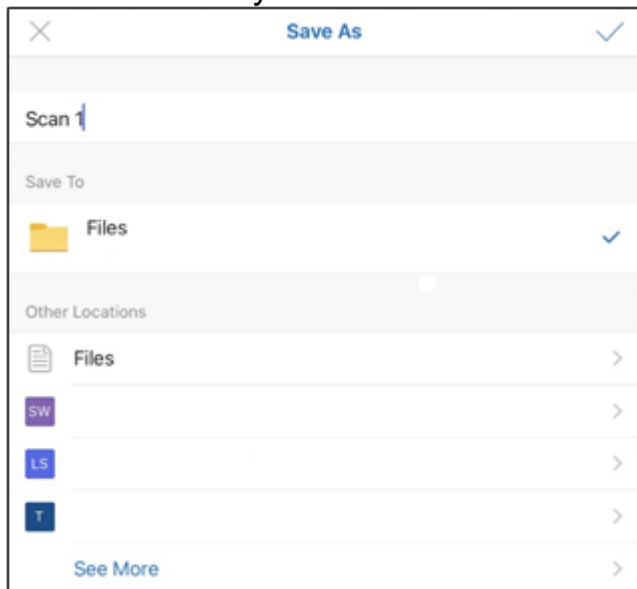


## Save your scan

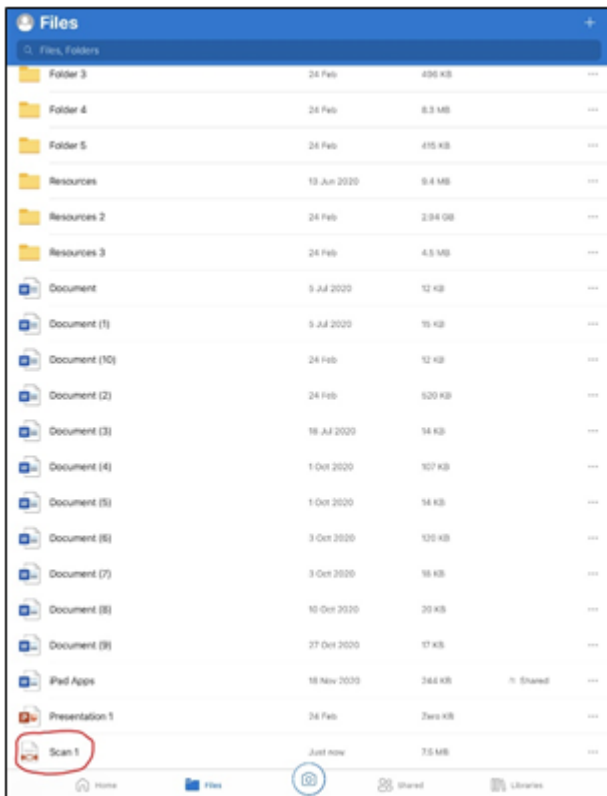
- You will now have the option to save your document. Click in the box circled in red and start typing in order to name your document.



- In the example below the file has been named 'Scan1'. Tap on the blue tick in the top right corner to save the document. The file will automatically be saved as a PDF.

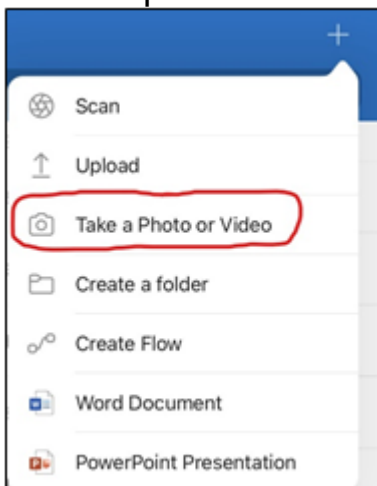


- Once saved, the Files tab is opened and highlighted on the features toolbar. The file 'Scan 1' is now in the list of folders and files, at the bottom.

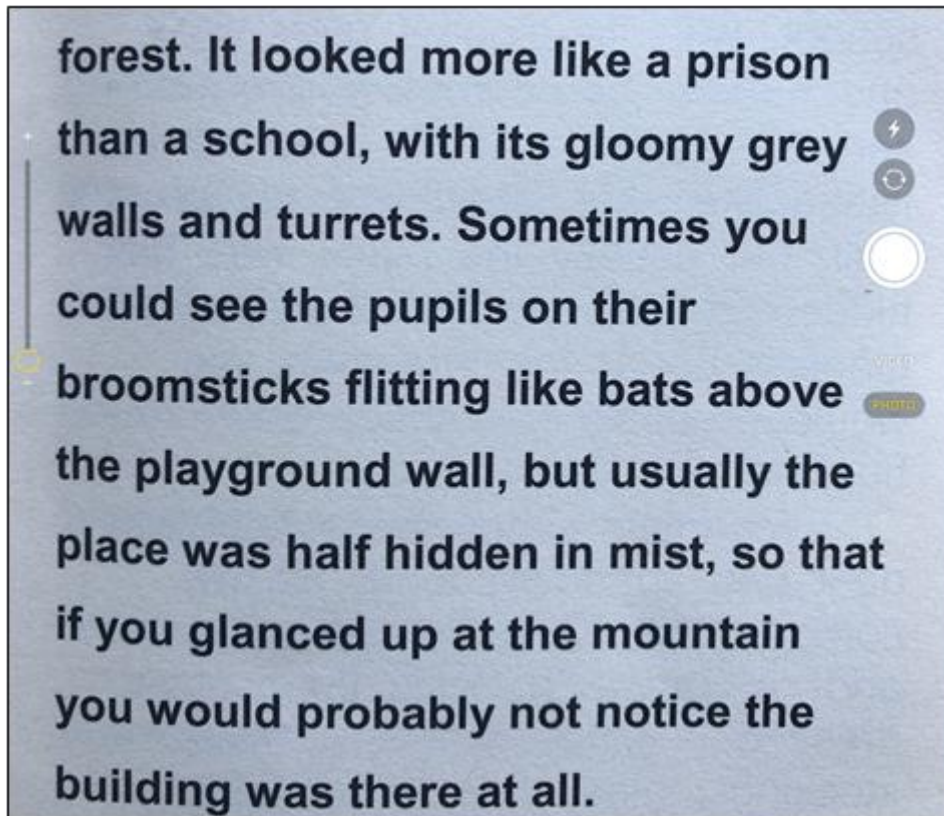


## Take a Photo or Video



- Tap on the Plus icon and then tap on Take a Photo or Video.



- You have the option to zoom in or out (left hand side), select the appropriate flash setting if available, switch between the front and rear facing camera and take a photo or video (right hand side). Press Cancel if you change your mind or want to retake the photo. The options are displayed in the following diagram:



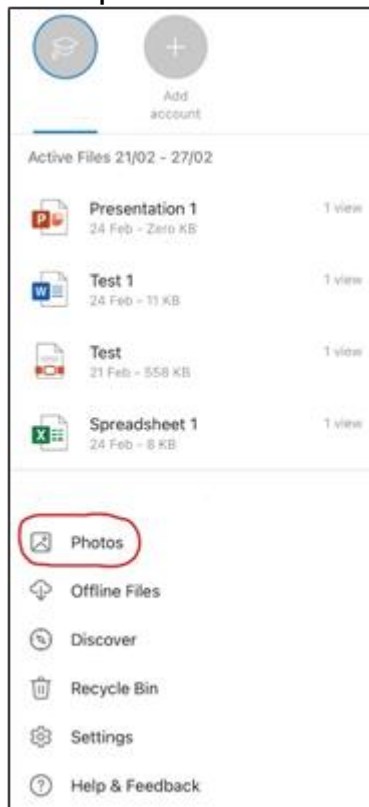
## Automatically save photos or videos

- Tap on your Me icon 
- Tap Settings  then Camera Upload.
- Turn on Camera Upload to automatically upload photos and videos to OneDrive.
- To make sure videos automatically upload, turn on Include Videos.
- You can only upload your camera roll to one account at a time, so make sure you are signed in with the account that you want to upload photos to. Tap the relevant account icon to switch accounts.

## Access photos and videos


- Tap on your Me icon 

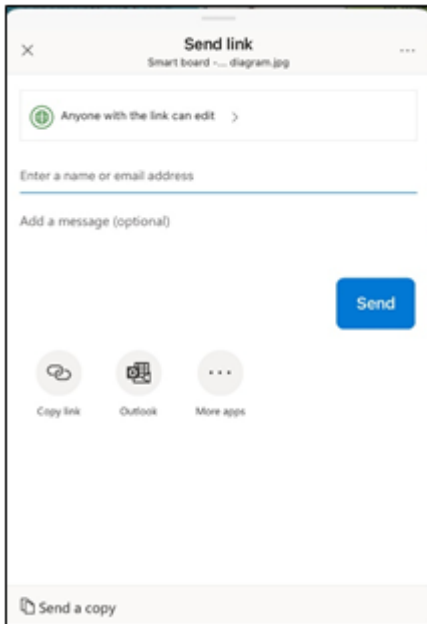
- Tap on Photos



- You will then be able to access all your photos and videos.
- To select a photo/video, tap on it.
- You will now be given options on the blue toolbar at the top right-hand side.






- Share the photo  by tapping on the Share icon and sending a link:




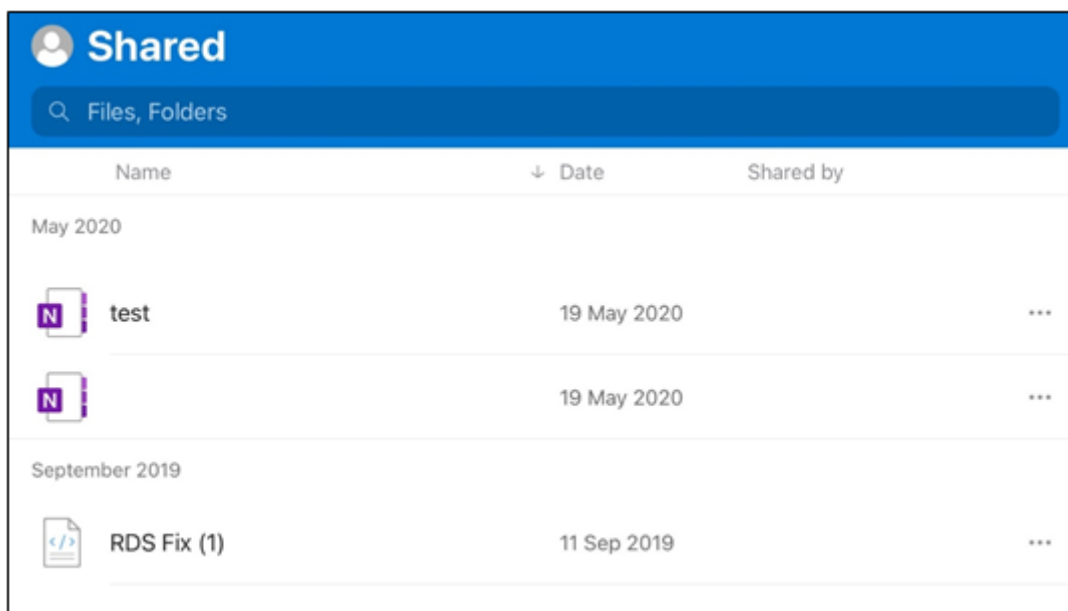
- Delete the photo by tapping on the delete icon 



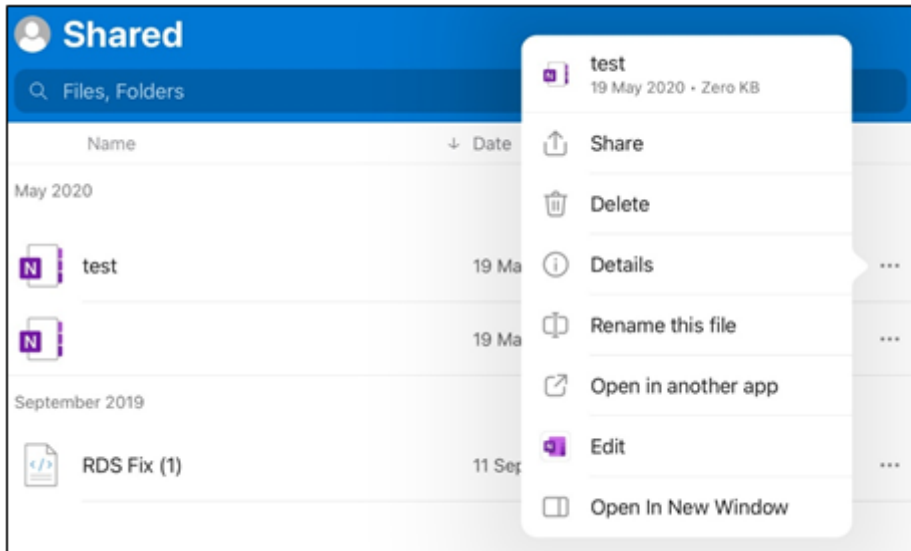
- Make the photo available offline by tapping on the Make Available Offline icon 
- View details of the photo by tapping on the information or 'i in a circle' icon 
- Download or rename the photo by tapping on the three dots 
- You can also access photos by tapping on the Photos tab on the blue toolbar at the bottom of the screen, if present.

## Files and folders shared with you

- When someone shares a OneDrive file or folder with you, you typically get an email message or a notification on your iPad. To find the files shared with you in the OneDrive app, tap the Shared view icon  on the toolbar at the bottom of the screen. You can access shared files and folders here if you tap the Shared icon. See diagram below (names of persons who have shared the files have been crossed out).




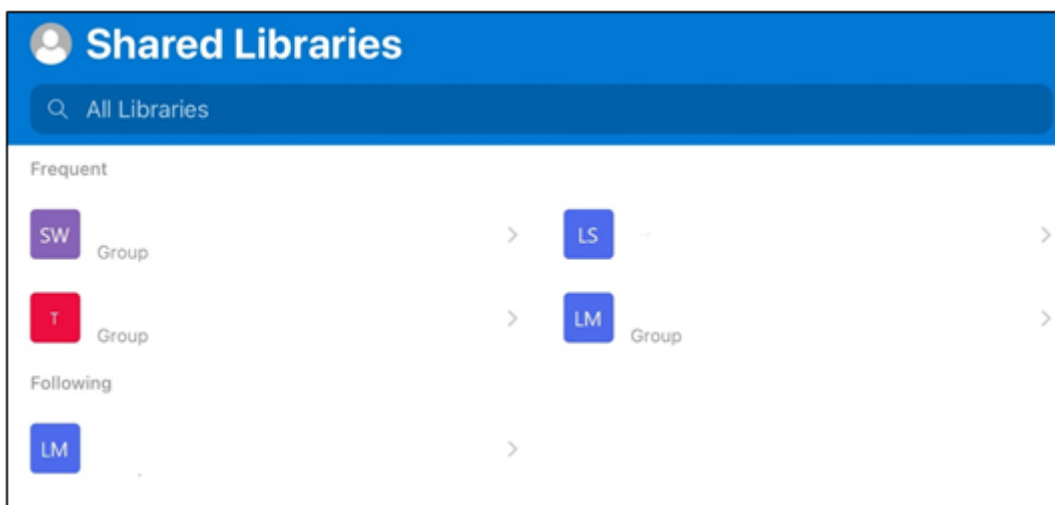
- If you tap on the three dots next to each file you will be given options to share/delete/view details/rename/open in another app/edit/open in a new window. See diagram below.



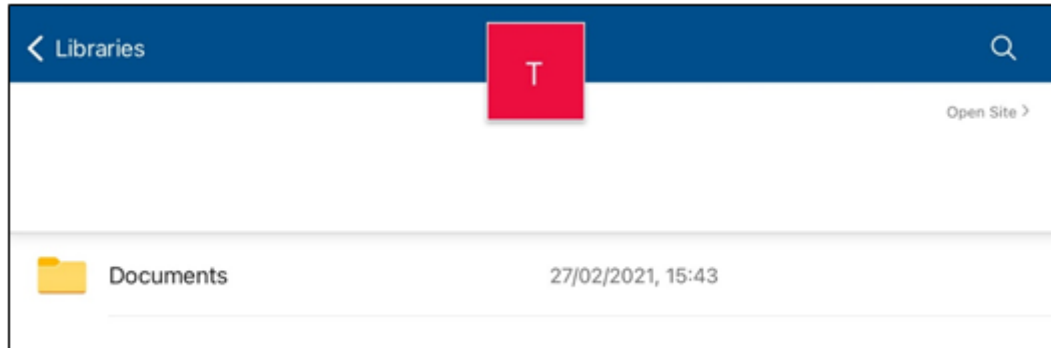
- The shared view shown in the diagrams is typical for a school/work account. The view is different if using a personal OneDrive account.

## Shared Libraries

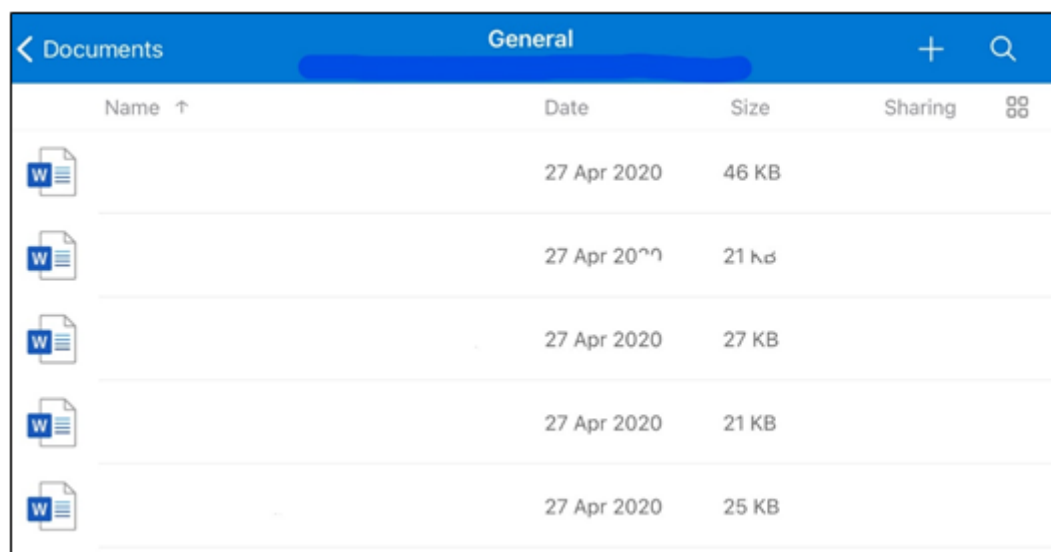
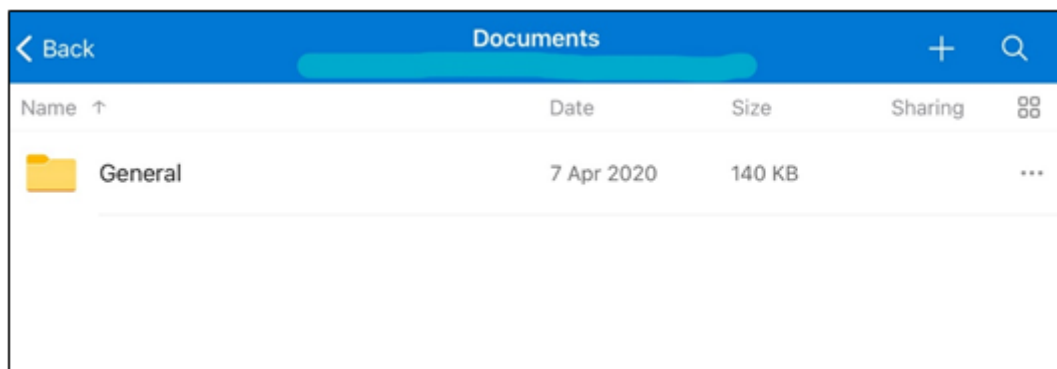
- You can view all your files and folders in your shared libraries here. Tap on the Libraries icon  on the Toolbar at the bottom of the screen. When you are working as a team — in Microsoft Teams, SharePoint, or Outlook—a shared library allows your team to store and access files/folders that your team members work on together, and OneDrive for work or school connects you to all your shared libraries. The diagram below shows an example of all the shared libraries for a OneDrive account (names have been crossed out).



- If you select a team by tapping on the name/icon you will be able to view the files/folders that the team are working on. In the diagram below Team 'T' has been selected which takes you to the Documents page (the name of the team has been crossed out).



- Tap on Documents to view all the files/folders that Team T are working on. The file may be under 'General'. It depends on where you place the file/folder in the site folder structure. (Names of sites/files have been crossed out).



# iPad Accessibility Skills

Using the Microsoft OneDrive app	Progression		
Basic Skills	Introduce	Developing	Achieved
Set up OneDrive			
Be familiar with the Home tab			
Set a passcode			
Add an account (optional)			
Switch between accounts (optional)			
Sign out of an account			
<b>Files Tab</b>			
Be familiar with the Files tab			
Be familiar with file/folder options			
Create a folder			
Know the instructions involved to be directed to create a word document			
Know the instructions involved to be directed to create a PowerPoint/Spreadsheet			
Access a file/folder			
Find a file/folder			
Change how files are sorted			
Move files/folders in and out of folders			
Upload files and folders			

Share files and folders			
<b>Intermediate Skills</b>			
<b>Files/folders</b>			
Move files/folders in and out of folders			
Upload files/folders/photos			
Share files and folders			
Delete a file/folder			
Rename a file/folder			
Make a file/folder available offline			
View details of file/folder			
Open in new window			
<b>Scans/photos/videos</b>			
Scan a document/whiteboard/business card and photo			
Edit your scan			
Save your scan			
Take a photo or video			
Automatically save your photo or video			
Access photos/videos			
Delete photos/videos			
Make photos available offline			
View details of photo and Download/rename photo			
<b>Advanced Skills</b>			
<b>Files/folders shared with you</b>			

Access files/folders			
Share files/folders			
Delete files/folders			
Rename files/folders			
Open in another app			
Edit files/folders			
Open in new window			
<b>Shared Libraries</b>			
View all files/folders			




# Appendices E – Using the Mail App

Mail is the iPad's inbuilt email app. Although it is possible to download specific apps for, for example, Gmail, Outlook and Hotmail, functionality is relatively limited on the iPad compared with Windows computers, so we will focus here on Mail which works well with all of these and is very comprehensive, allowing you to send and receive emails, photos, drawings.

## Setting up Mail

- Tap on **Settings**
- Tap on **Mail**
- Go to Accounts, then Add Account. Finally tap Other.
- To add your email account, tap Add Mail Account, and then enter all the information requested. This will include your email address and password, so make sure you have it handy.
- You could otherwise choose to set up a new account here.
- Tap Save when you have finished.

## Writing an email

- Within **Mail**, tap on the new message icon  to bring up a new email.
- Tap within the email, and then type your message using the onscreen keyboard. You can also choose to dictate the letter by tapping the microphone icon to the right of the keyboard, tapping at the bottom of the screen when you have finished.

- Tap the formatting icon  to change how the text in the body of your email looks - you can alter font style or size, text colour, add bold or italics and many more.

To add recipients:

- Tap in the To field, then type the names of recipients. Mail will make suggestions from your Contacts as you type. Alternatively, you can tap the Plus icon to open Contacts and add recipients directly.
- To send a copy, tap in the cc/bcc field and enter in the same way. The bcc field is for when there are names you don't want the other recipients to see.

You can also use Siri to combine these 2 steps. By asking her something like: "New email to Julia Roberts", it will open a new email and put Julia's email address in the To field.

Finally, click the blue Send arrow icon at the top right of the screen to send the email on its way.

## Replying to an email

- Tap within the email you want to respond to, tap the



Respond icon at the bottom right of the screen and select your response (you have the option to Reply, Reply All, Forward and many more).

- Type your response and then tap the Send icon.

## Adding attachments to an email

In Mail, you can attach many different things to, and within, an email, including photos, videos, scanned documents and handwritten notes.

## Attaching a saved document

- Within the email, tap where you want the document to be inserted.



- Tap the document icon above the keyboard.
- You will be given the option to Add Document or Scan a Document. Here, you will be adding a document that is already scanned in and saved, so tap Add Document.
- Locate the document in Files, then tap it to insert it.
- Alternatively, you can drag a file to your email to attach it.

## Attaching a saved photo or video

- Within the email, tap where you want the document to be inserted.



- Tap the camera icon above the keyboard.
- You will be given the option of looking for a photo in the Photo Library, or else taking a photo. Here, you want to attach a saved photo,



so tap the Photo Library icon .

- Locate the photo or video in the photo selector, swiping up to see more images. Tap to select the photo or image and insert it in your email.

## Taking a photo or video to put in an email

- Within the email, tap where you want the photo or video to be inserted.
- Tap the camera icon above the keyboard.
- This time, tap Take Photo to take a new photo or video, then tap Use Photo or Use Video to insert it.

If you want to re-take it, tap Retake.

## Scan a document into an email


- Within the email, tap where you want the scanned document to be




inserted, then tap the Scan Document icon above the keyboard.

- Hold the iPad above the document so that it can be seen on the screen.
- The iPad will capture the image automatically, but you can choose to capture it manually by pressing the shutter button or a volume button.
- Scan any additional pages you want.
- Tap Save (or Keep Scan) when you are finished – select Retake if you are not happy with what you have.
- Scan additional pages, then tap Save when you're done.

To make changes to the saved scan, tap it (it's a small image at the bottom of the screen), then edit it by tapping on any/all of the 3 edit tools at the top of the screen. These are:

Crop the image: 

Apply a filter: 

Rotate the image: 

You can also opt to just delete the scan.

Tap Save when done, and the image/s will automatically insert into your email.

## Viewing emails

### Preview an email and a list of options

In a mailbox list, touch and hold an email to preview its contents and see a list of options for what to do with it now, including replying and filing it.

By default, Mail will display 2 lines of text, but you can change the default to more lines by tapping on Settings > Mail > Preview and stating your preference.

### Show the whole email

In the list of emails, tap the one you want to read.

### Show the whole email conversation (thread)

To see a whole email thread rather than just a single email:

- tap on Settings
- tap on Mail
- turn on Organize by Thread

You can further customize how threads are displayed by changing others settings in Settings > Mail e.g. Most Recent Message on Top.

## Saving drafts for later

If you're writing an email and want to finish it later: within the email, tap Cancel, then tap Save Draft.

To get it back, touch and hold the New Message icon, then tap the draft in the list.

## Organising emails

### Flagging emails

Open the email, tap the Respond icon, then tap Flag.

- To choose a colour for the flag, tap a coloured dot.
- To change or remove a flag, open the email, tap Respond, then tap another colour, or Unflag.

An email you flag remains in your Inbox, but also appears in the Flagged mailbox. To see the Flagged mailbox, tap Mailboxes at the top left, tap Edit, then select Flagged.

### Getting notified of replies to emails or threads

You can create mail notifications when reading or writing an email.

- When reading an email: Tap the Respond icon, then tap Notify Me.
- When writing an email: Tap the Subject field, tap Notify Me (You

might also need to tap the Notification icon  then tap Notify Me.)

You can also create mail notifications that let you know when you receive emails in favourite mailboxes or from certain people. You might like to use Siri for this. Say something like: "Any new mail from Karen today?"

### Muting notifications

- Open an email in the conversation.
- Tap the Respond icon, and then tap Mute.

To specify what you want done with emails you muted, go to Settings > Mail > Muted Thread Action, then select an option.

### Move email to the junk folder

Open the email, tap the Respond icon, then tap Move to Junk.

Tip: immediately swipe left with 3 fingers to undo if you have made a mistake.

## Swiping to organise emails

While viewing an email list, slowly swipe an email to the left until you see the menu. Then tap an item. You can use this to Archive or Flag mails, but more options are available in More menu, including replying, forwarding, and marking as read.

To customise your Swipe options, go to Settings > Mail > Swipe Options.

## Organising emails with mailboxes

Use the Mailboxes list to view your mailboxes, rename or delete them or create new mailboxes.

### How to view Mailboxes

- When in Mail, tap Mailboxes in the upper-left corner.
- tap Edit at the top of the list then check the mailbox you want to read.

### How to add a mailbox

- When in Mail, tap Mailboxes in the upper-left corner.
- tap Edit, and then select New Mailbox at the bottom of the screen.
- enter a name and location, then tap Save.

### How to reorder your mailboxes

- in Mail, tap Mailboxes in the upper-left corner.
- tap Edit at the top of the list.



- touch and hold the order icon  next to a mailbox until it lifts up, then drag it to the position you want.

## Deleting emails

There are multiple ways to delete emails. Do any of the following:

- While viewing an email, tap the bin icon
- While viewing the email list, swipe an email left, then choose Trash OR swipe an email all the way to the left to delete it in a single gesture.
- To delete multiple emails at once while viewing a list of emails, tap Edit, select the emails you want to delete, then tap Trash.

- To select multiple emails quickly, swipe down through the checkboxes.

To turn the confirmation of deletion on or off, go to Settings > Mail, then turn on or off Ask Before Deleting.

If you change your mind, immediately swipe left with three fingers to undo.

## Recovering deleted emails

- Go to the account's Trash mailbox, then open the email.



- Tap the folders icon, then select a mailbox.
- If you change your mind, immediately swipe left with three fingers to undo.

Tip: To see deleted emails across all your accounts, tap Mailboxes at the top left, tap Edit at the top of the list, then select the All Trash mailbox.

## Using Mail with VoiceOver

- Open the Mail app.
- After you hear the sound that alerts you that new mail has been downloaded, begin swiping right. This will read your e-mail subject lines, one per swipe.
- When you reach an e-mail you wish to read, double tap to open it.
- At this point you can either perform a two-finger swipe down to read the e-mail from the beginning or a two-finger swipe up to read the entire e-mail.
- If it's a long e-mail, a three-finger swipe up will advance you one screen at a time through the e-mail, a two-finger swipe down will move you back toward the beginning.
- Lightly touch two fingers to the screen at any time to stop speech.
- Close your e-mail by performing a two-finger scrub (place two fingers on the screen and quickly move them an inch or so from side to side, as though you were scrubbing the glass), which will go back one screen, closing the e-mail you were reading.

# iPad Accessibility Skills

Using Mail	Progression		
Basic Skills	Introduce	Developing	Achieved
Set up a Mail account			
Write and send an email			
Reply to an email			
Intermediate Skills			
Add attachments to an email			
Attach a saved document			
Attach a saved photo or video			
Take a photo or video to attach to an email			
Scan a document to attach to an email			
Viewing emails			
Preview an email and a list of options			
Show the whole email			
Show the whole email thread			

Save drafts for later			
<b>Advanced Skills</b>			
<b>Organising emails</b>			
Flagging emails			
Mail notifications			
Mute notifications			
Move email to the junk folder			
Swiping to organise emails			
Organise emails with mailboxes			
Delete emails			
Recover deleted emails			
Using Mail with VoiceOver			

# Appendices F – Using the VoiceOver Keyboard Command

## Introduction

VoiceOver on iPad can be controlled from an external keyboard. Most VoiceOver gestures have equivalent keyboard commands. This reference lists the most common keyboard commands for controlling VoiceOver, navigating the web, and editing text.

## VoiceOver Modifier Keys

The VoiceOver Modifier Keys refer to one or two keyboard keys which combine with alphanumeric keys to form commands to control VoiceOver. The VoiceOver modifier can be configured to be one of the following:

- Control + Option
- Caps Lock

To customise the VoiceOver Modifier Keys:

- Go to Settings
- Tap Accessibility > VoiceOver > Typing > Modifier Keys
- Tap your choice of Control + Option or Caps Lock.

## General Commands

In the following tables, "VO" refers to the VoiceOver Modifier Key.

Action	Keystroke
Turn on VoiceOver Help	VO–K
Turn off VoiceOver Help	Escape
Select the next or previous item	VO–Right Arrow or VO–Left Arrow

Double-tap to activate the selected item	VO–Space bar
Press the Home button	VO–H
Touch and hold the selected item	VO–Shift–M
Move to the status bar	VO–M
Read from the current position	VO–A
Read from the top	VO–B
Pause or resume reading	Control
Copy the last spoken text to the clipboard	VO–Shift–C
Search for text	VO–F
Mute or unmute VoiceOver speech	VO–S
Open Notification Centre	Fn–VO–Up Arrow
Open Control Centre	Fn–VO–Down Arrow
Open the Item Chooser	VO–I
Change the label of the selected item	VO–/
Double-tap with two fingers	VO–”-”
Swipe up or down	VO–Up Arrow or VO–Down Arrow
Adjust the rotor	VO–Command–Left Arrow or VO–Command–Right Arrow
Adjust the setting specified by the rotor	VO–Command–Up Arrow or VO–Command–Down Arrow

Turn the screen curtain on or off	VO–Shift–S
Return to the previous screen	Escape
Switch apps	Command–Tab or Command–Shift–Tab

## Quick Nav

Quick Nav allows VoiceOver to be controlled with the arrow keys.

Action	Keystroke
Turn Quick Nav on or off	Left Arrow–Right Arrow
Select the next or previous item	Right Arrow or Left Arrow
Select the next or previous item specified by the rotor	Down Arrow or Up Arrow
Select the first or last item	Control–Up Arrow or Control–Down Arrow
Tap an item	Up Arrow–Down Arrow
Scroll up, down, left, or right	Option–Up Arrow, Option–Down Arrow, Option–Left Arrow, or Option–Right Arrow
Adjust the rotor	Up Arrow–Left Arrow or Up Arrow–Right Arrow

## Single-key Quick Nav on the Web

Action	Keystroke
Turn Single-key Quick Nav on or off	VO-Q

Element	Next	Previous
Link	L	Shift-L
Text field	R	Shift-R
Button	B	Shift-B
Form control	C	Shift-C
Image	I	Shift-I
Table	T	Shift-T
Static text	S	Shift-S
ARIA landmark	W	Shift-W
List	X	Shift-X
Item of the same type	M	Shift-M
Heading	H	Shift-H
Level 1 heading	1	Shift-1
Level 2 heading	2	Shift-2
Level 3 heading	3	Shift-3
Level 4 heading	4	Shift-4
Level 5 heading	5	Shift-5
Level 6 heading	6	Shift-6

## Navigating text

Tip: ensure that both “Quick Nav” and “Single-key Quick Nav” are turned off when navigating text.

<b>Navigate by</b>	<b>Next</b>	<b>Previous</b>
Character	Right Arrow	Left Arrow
Word	Option–Right Arrow	Option–Left Arrow
Line	Down Arrow	Up Arrow
Paragraph	Option–Down Arrow	Option–Up Arrow

<b>Move to</b>	<b>Beginning of</b>	<b>End of</b>
Line	Command–Left Arrow	Command–Right Arrow
Paragraph	Option–Up Arrow	Option–Down Arrow
Text area	Command–Up Arrow	Command–Down Arrow

## Editing text

Tip: ensure that both “Quick Nav” and “Single-key Quick Nav” are turned off when editing text.

<b>Action</b>	<b>Keystroke</b>
Select text as you move	Shift + any of the navigation commands above
Select all text	Command–A

Copy selected text	Command–C
Cut selected text	Command–X
Paste selected text	Command–V
Undo last change	Command–Z
Redo last change	Shift–Command–Z

# Appendices G – Instructions on Using VoiceOver Keyboard Commands

## Introduction

VoiceOver on iPad can be controlled from an external keyboard. Most VoiceOver gestures have equivalent keyboard commands. This reference lists the most common keyboard commands for controlling VoiceOver, navigating the web, and editing text.

## VoiceOver Modifier Keys

The VoiceOver Modifier Keys refer to one or two keyboard keys which combine with alphanumeric keys to form commands to control VoiceOver. The VoiceOver modifier can be configured to be one of the following:

- Control + Option
- Caps Lock

To customise the VoiceOver Modifier Keys:

- Go to Settings
- Tap Accessibility > VoiceOver > Typing > Modifier Keys
- Tap your choice of Control + Option or Caps Lock.

## General Commands

In the following tables, "VO" refers to the VoiceOver Modifier Key.

Action	Keystroke
Turn on VoiceOver Help	VO-K
Turn off VoiceOver Help	Escape

Select the next or previous item	VO–Right Arrow or VO–Left Arrow
Double-tap to activate the selected item	VO–Space bar
Press the Home button	VO–H
Touch and hold the selected item	VO–Shift–M
Move to the status bar	VO–M
Read from the current position	VO–A
Read from the top	VO–B
Pause or resume reading	Control
Copy the last spoken text to the clipboard	VO–Shift–C
Search for text	VO–F
Mute or unmute VoiceOver speech	VO–S
Open Notification Centre	Fn–VO–Up Arrow
Open Control Centre	Fn–VO–Down Arrow
Open the Item Chooser	VO–I
Change the label of the selected item	VO–/
Double-tap with two fingers	VO–”-”
Swipe up or down	VO–Up Arrow or VO–Down Arrow
Adjust the rotor	VO–Command–Left Arrow or VO–Command–Right Arrow

Adjust the setting specified by the rotor	VO–Command–Up Arrow or VO–Command–Down Arrow
Turn the screen curtain on or off	VO–Shift–S
Return to the previous screen	Escape
Switch apps	Command–Tab or Command–Shift–Tab

## Quick Nav

Quick Nav allows VoiceOver to be controlled with the arrow keys.

Action	Keystroke
Turn Quick Nav on or off	Left Arrow–Right Arrow
Select the next or previous item	Right Arrow or Left Arrow
Select the next or previous item specified by the rotor	Down Arrow or Up Arrow
Select the first or last item	Control–Up Arrow or Control–Down Arrow
Tap an item	Up Arrow–Down Arrow
Scroll up, down, left, or right	Option–Up Arrow, Option–Down Arrow, Option–Left Arrow, or Option–Right Arrow
Adjust the rotor	Up Arrow–Left Arrow or Up Arrow–Right Arrow

## Single-key Quick Nav on the Web

Action	Keystroke
Turn Single-key Quick Nav on or off	VO-Q

Element	Next	Previous
Link	L	Shift-L
Text field	R	Shift-R
Button	B	Shift-B
Form control	C	Shift-C
Image	I	Shift-I
Table	T	Shift-T
Static text	S	Shift-S
ARIA landmark	W	Shift-W
List	X	Shift-X
Item of the same type	M	Shift-M
Heading	H	Shift-H
Level 1 heading	1	Shift-1
Level 2 heading	2	Shift-2
Level 3 heading	3	Shift-3
Level 4 heading	4	Shift-4
Level 5 heading	5	Shift-5
Level 6 heading	6	Shift-6

## Navigating text

Tip: ensure that both “Quick Nav” and “Single-key Quick Nav” are turned off when navigating text.

Navigate by	Next	Previous
Character	Right Arrow	Left Arrow
Word	Option–Right Arrow	Option–Left Arrow
Line	Down Arrow	Up Arrow
Paragraph	Option–Down Arrow	Option–Up Arrow

Move to	Beginning of	End of
Line	Command–Left Arrow	Command–Right Arrow
Paragraph	Option–Up Arrow	Option–Down Arrow
Text area	Command–Up Arrow	Command–Down Arrow

## Editing text

Tip: ensure that both “Quick Nav” and “Single-key Quick Nav” are turned off when editing text.


Action	Keystroke
Select text as you move	Shift + any of the navigation commands above
Select all text	Command–A

Copy selected text	Command–C
Cut selected text	Command–X
Paste selected text	Command–V
Undo last change	Command–Z
Redo last change	Shift–Command–Z

# Appendices H – Instructions on Using a Braille Display with VoiceOver on iPad

iPad supports many international braille tables and refreshable braille displays. You can connect a Bluetooth wireless braille display to read VoiceOver output, including contracted and uncontracted braille and equations using Nemeth Code. When you edit text, the braille display shows the text in context, and your edits are automatically converted between braille and printed text. You can also use a braille display with input keys to control your iPad when VoiceOver is turned on. For a list of supported braille displays, see the Apple Support article [Braille displays supported by iPhone, iPad, and iPod touch](#).

Connect a braille display and learn commands to control iPad  
Turn on the braille display.

On iPad, go to Settings  > Bluetooth, turn on Bluetooth, then choose the display.

Setting	Description
Output	Choose uncontracted six-dot, uncontracted eight-dot, or contracted braille.
Input	Choose uncontracted six-dot, uncontracted eight-dot, or contracted braille; you can also turn on Automatic Translation.
Braille Screen Input	Choose the input method for entering braille using the screen. See <a href="#">Type braille directly on iPad using VoiceOver</a> .
Braille Tables	Add tables that appear in the Braille Table rotor.
Status Cells	Turn on the general and text status cells and choose their location.
Equations use Nemeth Code	Turn on Nemeth Code for mathematical equations.


Show On-screen Keyboard	Display the keyboard on the screen.
Turn Pages when Panning	Automatically turn pages when panning.
Word Wrap	Wrap words to the next line.
Alert Display Duration	Adjust the duration that an alert is visible on your braille display.
Ignore Chord Duration	Adjust the amount of time required before subsequent key presses are recognized as braille chords.
Auto Advance Duration	Adjust this setting to your preferred reading speed.

On iPad, go to Settings > Accessibility > VoiceOver > Braille, then choose the display.


To see the braille commands for controlling iPad, tap More Info, then tap Braille Commands.

See the Apple Support article [Common braille commands for VoiceOver on your iPhone, iPad, and iPod touch](#).

### Change the braille display settings

On iPad, go to Settings  > Accessibility > VoiceOver > Braille.  
Set any of the following:

Output closed captions in braille during media playback

On iPad, go to Settings  > Accessibility > VoiceOver > Verbosity.  
Choose Braille or Speech and Braille.

# Appendices I – Useful Apps

<b>Talking scientific calculator</b>	Calculator	Large colourful buttons, optional high contrast, full voice over support and option to use speech for answers, buttons names and formulas	£4.99
<b>Talking statistics calculator</b>	Calculator	As above	£3.99
<b>Brighter and bigger</b>	Reading	A reading glasses tool for people who have difficulty reading fine print and focusing on nearby objects due to presbyopia, eye illness etc	Free
<b>Magnifying Glass with Light</b>	Reading	This app enables the user to very simply magnify text or objects up to 10x. You can have the light on or off and simply tap to focus. The simple features all work well	Free
<b>Dolphin Easy Reader</b>	Reading	Use with DAISY, Epub or text books (links with RNIB Bookshare). Works with VoiceOver and iOS supported braille displays. Zooms in, choose colours, text size and highlights to suit visual needs.	Free
<b>BigMagnify</b>	Reading	Magnifying glass and flashlight. Turn your iphone/ipad into a state of the art magnifying glass!	Free

<b>DAISY Talk</b>	Reading	DAISY (Digital Accessible Information System) is an international standard for digital books designed for people with print disabilities. DAISY Talk is an app that reads out text of a DAISY book using a synthesized voice incorporated into an iOS device.	£25.99
<b>KNFB reader</b>	Reading	Reader takes a photo of text and then reads it aloud in clear synthetic speech. It is fully accessible using VoiceOver. It has text detection so you know you have the printed side of the page. It also has tilt assist and viewfinder assist, helping you to get the whole page photographed.	£99.99
<b>Kindle</b>	Reading	This fully accessible app enables you to turn your iPhone or iPad into a Kindle. You're able to turn any eBook in to large print and all the eBooks (including those with narration) that you have purchased on Amazon will automatically appear in your app. Kindle Unlimited and Amazon Prime members can select and download eBooks directly in the app.	Free
<b>The MD_evReader App</b>	Reading	This has been developed to help people with a central vision loss read. It presents text from eBooks in a scrolling stream across the screen. The	Free

		app is designed for those people who use Eccentric Viewing (EV) and/or steady eye strategies for reading. Some people with macular degeneration may find it useful as a reading aid, or as a way of practising the Eccentric Viewing and steady eye techniques. The line of text scrolls horizontally from left to right and the reader aims to hold their gaze away from the line to view it with their best region of vision. The trackpad is used to control the speed of the text.	
<b>Audible</b>	Audio book service	Audible is an audio book service brought to you by Amazon. It has all the best sellers as well as classics, non-fiction and much more, professionally narrated by actors.	One month Free trial then £7.99 a month
<b>Prizmo</b>	Text to Speech	Prizmo is a photo-based scanner app that lets you scan and recognize text documents, business cards, and images, and then export them as PDF/Text, vCard, or JPEG/PNG with VoiceOver.	£9.99
<b>Dragon Anywhere: Dictate</b>	Speech to Text	Professional grade dictation app.	1 week's trial then £109.99 annually
<b>Voice Dream Scanner</b>	Scanning	Voice Dream Scanner is the ultimate app for scanning, recognising and reading printed documents.	£5.99

		Voice Dream Scanner has additional options for saving documents as PDFs or plain text and you can save those documents to locations including Dropbox and Google Drive to view on other devices. You can also use Voice Dream Scanner in conjunction with Voice Dream Reader.	
<b>Voice Dream Reader</b>	Text to speech	This is an advanced text-to-speech app with a highly configurable screen layout so that it can be tailored to suit every reading style from completely auditory to completely visual, plus synchronized combination of both. It supports reading, PDF and Word documents, eBooks, Web pages and more. It also has a range of languages.	£19.99
<b>Speechify-Audio Text Reader</b>	Text to speech	This turns reading material into interactive audiobooks. It can read books, documents and articles.	Free and upgrades available
<b>Access Note</b>	Note taker	AccessNote is a note taker used and developed by the American Foundation for the Blind.	Free
<b>Aipoly Vision</b>	ILS	Users point the app at an object and simply press a recognition button.	Free and upgrades available at a cost
<b>iDentifi</b>	ILS	iDentifi is an app that uses artificial intelligence to enable users with a vision impairment	Free

		to click a photo and get an instant description. It's able to recognise objects, brands, colours, facial expressions, handwriting and text, and delivers an audible description of the image's contents to the user. The interface is very accessible and gives the option to choose from three different modes of object and text recognition, as well as how fast you want the app to speak.	
<b>SeeingAI</b>	Many uses	Describes the people, text and objects around you	Free
<b>TapTapSee</b>	Many uses	TapTapSee uses a phone's camera and VoiceOver functions to photograph objects and identify them for the user. You double-tap the device's screen to photograph any two or three dimensional object at any angle, and the app analyses the image and gives you a description, out loud, within seconds.	Free
<b>CamFind</b>	Many uses	CamFind allows you to do an online search by simply taking a photo of an object – the app then uses mobile visual search technology to tell you what it is.	Free

<b>Ariadne GPS</b>	ILS	Allows users with a vision impairment to navigate directions using talking maps and an innovative interface. Ariadne works anywhere accessible by Google Maps.	£4.99
<b>Be My Eyes</b>	ILS	An app that connects people with a vision impairment with fully-sighted volunteers who provide virtual assistance through a live video call. Be My Eyes is available in 180 languages.	Free
<b>Bespecular</b>	ILS	This app links up fully-sighted volunteers with users with a vision impairment. The person with a vision impairment takes a photo of what he or she needs help with and attaches a voice message, which is sent to a community of volunteers. Within minutes, the user receives a reply and then rates out of five stars the helpfulness of the volunteer.	Free
<b>Color ID</b>	ILS	Colour Identifier uses the camera on your phone or tablet to identify and speak the names of colours in real-time. It's an augmented reality app that helps you discover the colours around you.	Free
<b>Light Detector</b>	ILS	Light Detector transforms any natural or artificial light source it encounters into sound. Just run the application and point your phone's camera in any direction. You will hear a higher or lower sound depending on the intensity of the light, enabling you to	£1.99

		understand where light fixtures and windows are in a room.	
<b>Clew</b>	ILS	Helps people with a vision impairment navigate indoor environments independently. iOS 11 or later. Works best in well-lit environments with distinct visual features and few moving objects	Free
<b>BlindSquare</b>	ILS	An accessible GPS app, which describes the environment, announces points of interest, streets and user specified points as you travel. Once BlindSquare has determined your location using your phone's GPS, it will look up information about your surroundings.	£38.99
<b>Microsoft Soundscape</b>	ILS	The app uses 3D audio technology to enable you to build up a mental map of your location as you travel.	Free
<b>ATM Finder</b>	ILS	Users can filter search to find ATMs that have audio assistance, are Free to use, belong to a specific organisation, such as your bank, and are wheelchair accessible. The app is GPS-enabled and shows you the ATMs that are closest to you on a map and also allows you to search for ATMs in other locations to help you plan ahead.	Free
<b>Digit – Eyes</b>	ILS	This app reads manufacturer's barcodes and tells you the product name. In some cases it will give you a full	Free version available with

		description, usage instructions and ingredients. You can also record your own audio labels or make text labels that are read aloud by your phone.	upgrade for £9.99
<b>acceletype</b>	Touch-typing	Helps people of all ages learn to type with speed and accuracy. Can use an external keyboard and adjust font size.	£4.99
<b>Visual Braille Lite</b>	Braille	You can type in standard text and visual braille converts it (Grade 1/uncontracted).	Free
<b>Visual Brailer</b>	Braille	A simple braille editor. 6 dot braille on screen keyboard, indefinite number of 40 cell braille lines, cut copy and paste braille, refreshable braille display input and output, BRL (unformatted) and BFR (formatted) braille file export.	Free
<b>Pocket braille Lite</b>	Braille	Learn the alphabet and punctuation symbols of the Braille code as an entry point to the language.	Free
<b>BrailleNow</b>	Braille	Designed to teach fully-sighted persons how to recognize the Braille letters a-z.	Free
<b>These apps have been specially developed for children with CVI</b>	Visual stimulation	wonderbaby.org/articles/cvi-apps e.g. <a href="#">Fluidity HD</a> : Very responsive screen encourages simple motor movements with bold visual displays. Great for teaching cause and effect and increasing visual attention (no audio).	Free and apps to purchase
<b>Infant visual stimulation</b>	Visual stimulation	This app contains high contrast pictures in flashcard	£4.99

		format, designed for new-borns and babies.	
<a href="#"><u>Baby Screen</u></a>	Visual stimulation	This app displays simple animated patterns designed to appeal to babies' developing visual systems.	Free
<a href="#"><u>Atlas of Ophthalmology</u></a>	QTVI resource	Clinical images of virtually all eye diseases.	Free
<b>Vision Sim</b>	QTVI resource	This app was developed to allow people with healthy vision to see the world through the eyes of a person experiencing one of nine degenerative eye diseases.	Free
<b>EYEWARE</b>	QTVI resource	Eyeware lets you view your surroundings with a range of the most common eye conditions.	Free
<b>Thru my eyes</b>	QTVI resource	Vision simulation app for Leber's and RP	Free
<b>Chromatic vision simulator</b>	QTVI resource	Colour vision simulation tool which simulates the colour vision of colour vision deficiencies.	Free
<b>Vision test</b>	Vision assessment	Search for Vision test and a range of apps are available for colour vision and Snellen charts.	Free
<b>Kaysight Test professional</b>	Vision assessment	You can measure and record near and distant visual acuity in children from 18 months of age.	There is a cost after a Free trial