



CAMBRIDGE
UNIVERSITY PRESS

ICT Starters

Initial Steps

Victoria Ellis, Sarah Lawrey and Doug Dickinson

Executive
Preview



Fourth edition

 Cambridge Assessment
International Education

Endorsed for full syllabus coverage

Brighter Thinking

Better Learning

At Cambridge University Press, **Brighter Thinking** drives our approach to ICT. A solid foundation of research and partnerships with teachers around the world underpins the resources we publish to support students. This research, alongside best practice pedagogy, helps us understand the needs of ICT learners, allowing us to tailor our resources to best support them.

Through a flexible suite of resources, designed to meet a wide range of needs in the classroom, **Better Learning** is possible. Students can accelerate their learning and develop skills for life.

From Microsoft® Office basics, such as creating documents and sending emails, to more advanced tasks including programming and creating websites, the fourth edition of our *ICT Starters* collection helps learners master new skills with ease.

In line with the new syllabus updates, we have included key information on e-safety throughout our series, and our clear module objectives at the beginning of each chapter demonstrate specific skills and whether they correspond to a Pass or Merit grade.

As well as this, we have increased learning content in our books by 50%, meaning there is more material than ever for engaging ICT lessons, and our step-by-step diagrams ensure our resources are suitable for both first language and second language learners.

With more learning support, a comprehensive teacher's resource, and clear, task-based learning approach that enables students to consolidate their skills, the new *ICT Starters* suite provides full coverage of the Cambridge ICT Starters syllabus.

With this in mind, I'm very pleased to share with you a sample from our forthcoming *Initial Steps* coursebook. Please do take the time to look through and consider how it could support your students.

If you would like more information, or have any questions, please contact your local sales representative: **[cambridge.org/education/find-your-sales-consultant](https://www.cambridge.org/education/find-your-sales-consultant)**

Thomas Carter

Senior Commissioning Editor - *ICT Starters*
Cambridge University Press



Hello, my name is Doug Dickinson and I, with co-authors Sarah Lawrey and Victoria Ellis, have had the pleasure in rewriting and updating the activities and content of *ICT Starters*.

Since the last edition was updated and published in 2013, there have been a number of changes in the world of communications technology. This new edition has been written to bring these to the forefront, ensuring learners are dealing with the most up-to-date information and ideas.

The syllabus has been examined closely and our series refreshed to take into account these changes. The core titles in each of the books have been retained but have been rewritten with new content to support an interactive way of learning.

Major changes have been made to three key modules.

- In *Initial Steps*, the module called 'Starting Control' has been renamed 'Starting Programming' and now contains an introduction to 'Scratch', a visual programming language
- In *Next Steps Stage 2* the module called 'Exploring Control' has become 'Exploring Programming' and this continues the work begun with the Scratch application and develops the use of algorithms to include procedures using repetition
- The module in *On Track Stage 2*, previously 'Control for a Purpose', has been rewritten and is now called 'Programming for a Purpose'

These three put the early concepts of computer science and its related work on computational thinking into the hands of the next generation.

Also, as is in keeping with current times, there is a reinforced emphasis on e-safety, responsible use of technology and ethical behaviour when students are working with digital data.

The structure of each module has also changed significantly to support this new approach. Each book contains a clear indication of the module objectives and an explanation of the various information structures which guide users through its use. Each module begins with activities that build up the skills inherent in the content, which are then tested and explored within a 'creative scenario', some further 'challenges' and a 'final project'.

The future of learning is based on experimentation and 'trial and improve'. The essence of these books is that through challenging, enjoyable activities, students will grow in confidence to deal with and develop their use of technology.

I sincerely hope that you and your students will enjoy using our new resources.

Kind regards,

Doug Dickinson

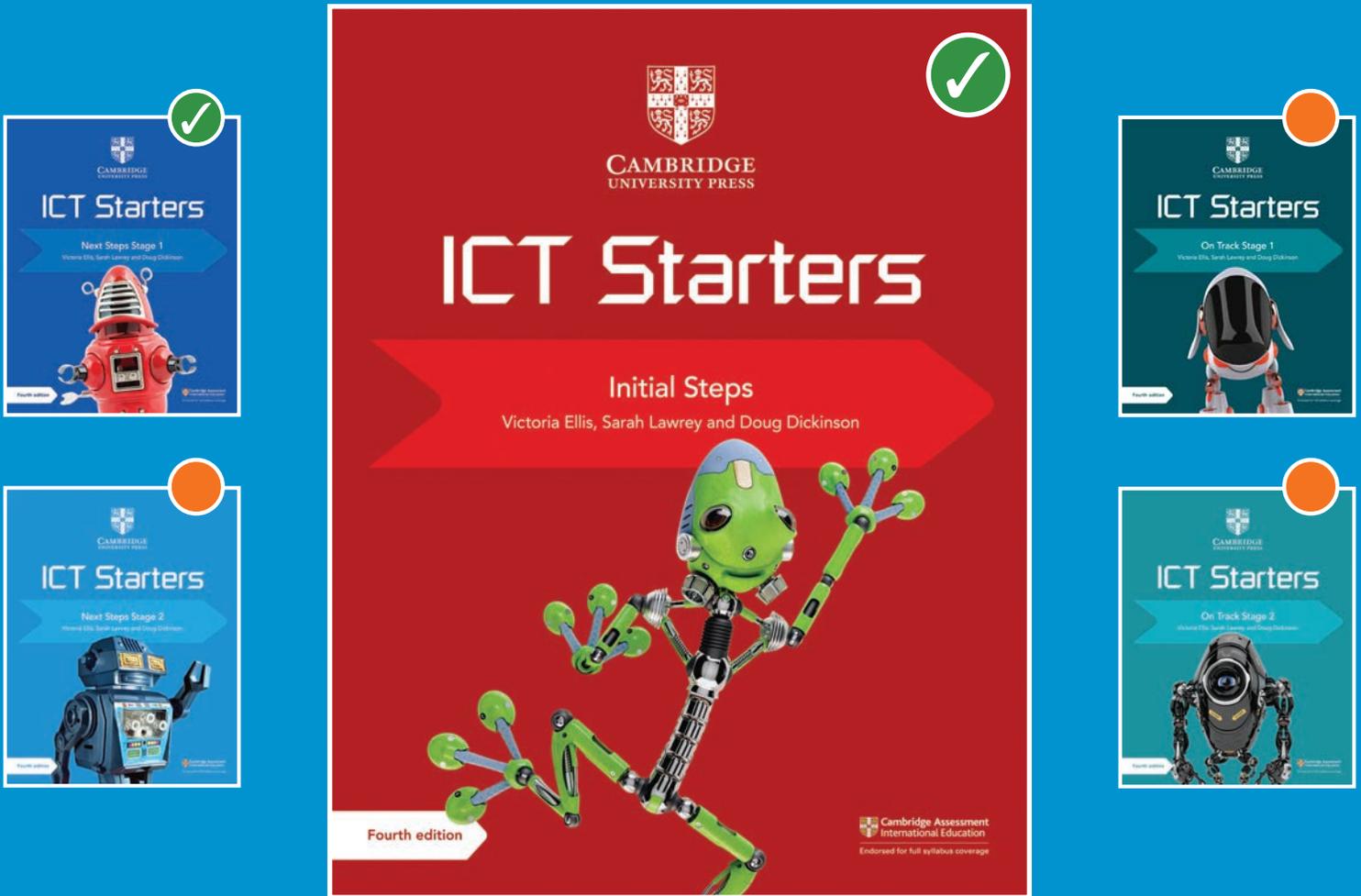
Author of *ICT Starters*

Doug Dickinson is an experienced author, ICT lecturer and educational consultant.

Teacher's resource coming soon

Series overview

The *ICT Starters* series is made up of five coursebooks and a teacher's resource.



Our brand-new series brings a fresh approach to ICT for students from 7 to 14 years old, mapped to the Cambridge ICT Starters syllabus for examination from 2019. With more activities than ever before, our coursebooks help students learn new ICT skills and offer learners plenty of opportunities to consolidate their knowledge.



Resources with this symbol are endorsed by Cambridge Assessment International Education

Brighter Thinking

Better Learning



Working towards endorsement by Cambridge Assessment International Education

How to use this book

How to use this book

In every module, look out for these features:

Module objectives: this table shows you the key things that you will learn in this module.

	In this module you will learn how to:	Pass/Merit	Done?
1	Plan a short sequence of instructions (an algorithm)	P	
2	Create a program as a sequence of instructions.	P	

Key words: these boxes provide you with definitions of words that may be important or useful.

Key word

Order: the way items are arranged.

Did you know?: these boxes provide interesting information and opportunities for further research.

Did you know?

Angles are important and you will learn about these in mathematics, too.

Tip: these boxes give you handy hints as you work.

Tip

Don't worry about the numbers in the axis, these will change when you enter your totals.



WATCH OUT!

These boxes help you to avoid making mistakes in your work.

Challenge: These activities are more difficult tasks for you to try, and extend beyond the syllabus.

Challenge

Scenario: These are tasks that help you practise everything you have learnt in the module in a “real-life” situation.

Scenario

Escape from the castle

Pass/Merit: this shows you the level of all of the activities in the book.

Skill 6

P/M

M

P

Skill box: these boxes contain activities for you to test what you have learnt.

Skill 1



CAMBRIDGE
UNIVERSITY PRESS

ICT Starters

Initial Steps

Victoria Ellis, Sarah Lawrey and Doug Dickinson



Fourth edition

 Cambridge Assessment
International Education

Endorsed for full syllabus coverage

Contents

Initial Steps

Introduction

1	Starting with text	6
2	Starting images	24
3	Starting graphs	43
4	Starting programming	73
5	Starting searches	90
6	Starting email	106



Did you know?

Before computers were invented, people used typewriters to create documents that they did not want to write by hand.

A typewriter let them press a key, like we do on a keyboard. The key would then strike an ink ribbon to make a letter appear on the page.



	In this module, you will learn how to:	Pass/Merit	Done?
1	Enter simple words, using a keyboard or other device	P	
2	Select and edit text	P	
3	Select basic icons (e.g. print, save or spell check) using the mouse or other pointing device	P	
4	Name, save and retrieve documents	M	
5	Use appropriate methods to check text is error free.	M	

In this module you are going to develop typing skills to help you work towards your final project. This project will be about writing an article for your school magazine. You will learn:

- the basic skills of word processing
- to type text into a document to create words and sentences
- how to use the buttons on a mouse to select and change text in a document
- how to use some of the many buttons that you can see in Microsoft Word
- how to save your document with a suitable filename
- how to check your text for errors, including using a spellchecker and proofreading.

You will also learn:

- how to stay safe when using a computer
- how to rename a document that you have saved.

Before you start

You should:

- be able to write simple sentences using spaces, full stops and capital letters
- understand what a mouse is
- understand that when you move a mouse it will move a pointer on the computer screen.

Introduction

Word processing is when you create or change electronic documents by typing **text** or changing text in the document. Word processing is a very valuable skill to master.

You will use it many times and for many reasons, from creating school work, to applying for your dream job.

Word-processing skills are used to create electronic documents that you can share with people using email or other electronic methods of communication. Having these skills also means you can save a copy of the document so that you can change it whenever you want.

The word-processing **software** you will use in this module is Microsoft Word. There is other word-processing software available, so you may be using a different one. You will probably find, however, that they all have very similar buttons and **icons** on the buttons.



WATCH OUT!

You need to make sure that you stay safe when using a computer. You should not have any food and drink near you when using one. You could easily spill your drink onto the computer and this could cause an electric shock.

You could also drop food into your keyboard and this may clog the **keys** and stop them working.

You should never touch the wires that plug into your computer. If you have any problems with your computer, you should always tell your teacher.

Key words

Word

Word processing:

this is the skill of typing and editing text.

Text:

these are the letters and words that appear on screen when you type using the keys on the keyboard.

Software:

this is a program that you use on the computer to do different things, such as word processing.

Icon:

this is an image, a word, or an image and word together on a button that you can click.

Keys:

these are all the things on a keyboard that you can press.

Skill 1

Using a mouse

You need to use a **mouse** to choose where you want to start typing text and to **select** the text that you want to edit.

When you move your mouse, you will see a **pointer** move on the **screen**.



Key word

Mouse:

this is part of a computer that you use to move the pointer on the screen.

Key words

Select: this is when you highlight some text because you want to edit it.

Pointer: this is the marker that appears on screen to show you where the mouse is.

Screen: this is the part of the computer that lets you see all the text that you have typed.

Cursor: this is a marker on the screen that lets you know where the text will be when you start typing.

A mouse normally has two buttons: a left button and a right button. You will use the left one most of the time. This is the button that you will click to select different things.

You might need to do a single-click to select, or a double-click. A single-click means that you click the mouse button once. A double-click means that you click the mouse button twice. Make sure that you click it twice very quickly.

Activity 1.1

Open a new document by double-clicking on the Microsoft Word icon on your computer's desktop. You should see a blank page on the screen. Find the mouse pointer on the screen.

Move the pointer to the left side of the screen, then across to the right side of the screen. What do you notice about the pointer when it is on the page and off the page?

Move the pointer to the top of the screen, then all the way down to the bottom of the screen.

Activity 1.2

Look for the flashing line at the top left of the document. This flashing line shows where you will start typing text into the document; this is called the **cursor**.

Move the mouse pointer to the middle of the page and double-click the left mouse button. You should see that the cursor has moved from the top of the page to the middle of the page.

Skill 2



Using a keyboard

You can use a keyboard to type text into an electronic document. You need to press the keys on the keyboard so that the text appears on the screen. You will need to learn how to type using lots of different keys.



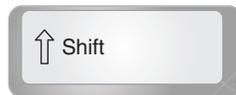
Typing a word

To type a word, find the letters that are needed for the word on the keyboard and press each letter. You will see each letter appear on the screen to make the word. Letters can also be called **characters**.

When you type a word at the beginning of a sentence or on its own, you might see the first letter of the word change to a **capital letter**. This is because Microsoft Word is often set to change the first letter of every sentence to a capital letter.

Typing capital letters

To make a letter a capital letter, press and hold down the **Shift** key then press the letter you want to type as a capital letter. When you have typed the letter, you can stop pressing the shift key.



You can use the **Caps Lock** key to type more than one letter in capitals. If you press this key, every letter that you press after that will be typed as a capital letter until you press the caps lock key again.

Typing spaces between words and sentences

To create a space between each word, finish typing the word then press the **Space bar** key. The space bar key is normally the big, long key that is at the bottom of your keyboard in the middle.



To create a space between sections of text (for example, to make a new paragraph), finish typing the sentence and press the **Enter** key. This will move the cursor down to the next line of your document so you can write your next paragraph.



Typing punctuation

When you begin typing sentences into your document, you will need to use **punctuation**. The two most common pieces of punctuation that you will need to use are the comma and the full stop.

Key words

Character: a character is any letter, number, symbol or punctuation mark.

Capital letter: this is a letter that is written in uppercase and is normally used at the start of a sentence.

Shift: this is a key on the keyboard that you need to press and hold to do certain tasks.

Caps lock: the key on the keyboard that, when pressed, will make all letters that you type into capital letters.

Space bar: this is the long key at the bottom of the keyboard that lets you create spaces between words.

Key words

Enter: this is a key on the keyboard that you can use to move the cursor to the next line.

Punctuation: these are characters such as a comma, a full stop and a question mark.

To type a comma, you need to press the comma key.



To type a full stop, you need to press the full stop key.



On your keyboard, you may see that some keys have a character at the bottom and a character at the top. When you press the key, it is the character at the bottom that will be typed.

If you want to type the character at the top, you need to press and hold the shift key, then press the character key, and the character at the top will be typed.

Activity 2.1

Type the following sentence into your document:

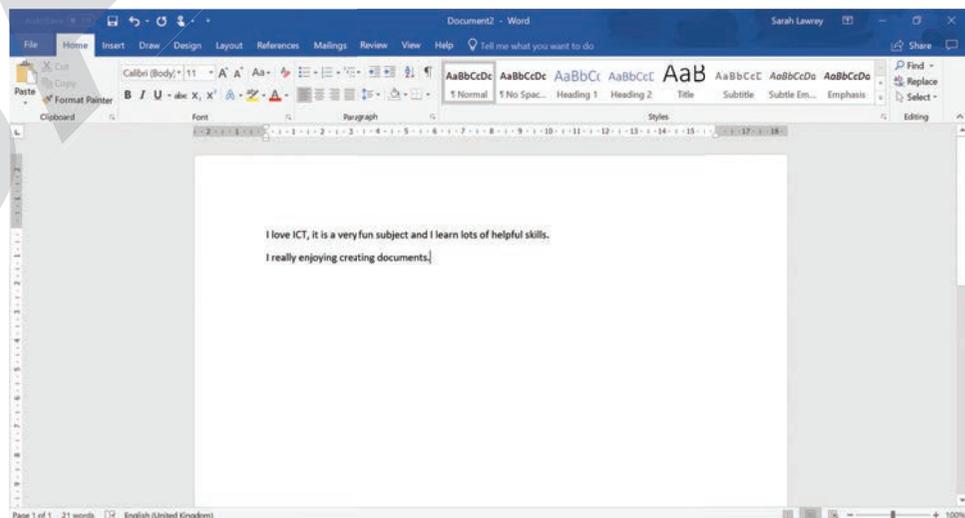
I love ICT! It's really good fun and I learn lots of useful skills.

Make sure you use the correct punctuation.

Activity 2.2

Look back at the 'Typing spaces between words and sentences' section above. Create a new paragraph and type another sentence about your favourite part of ICT.

Make sure that you have a space between your last sentence and your new sentence to show that you have created a new paragraph.



Skill 3



Selecting and editing text

Sometimes when you are typing text you might make a mistake. Sometimes you might decide that you don't like some text that you have typed and want to change it. When you change text, this is called **editing** it.

Deleting text

To edit the text, you might need to **delete** text first. You can delete text one letter at a time, or you can delete a whole word or sentence at once.

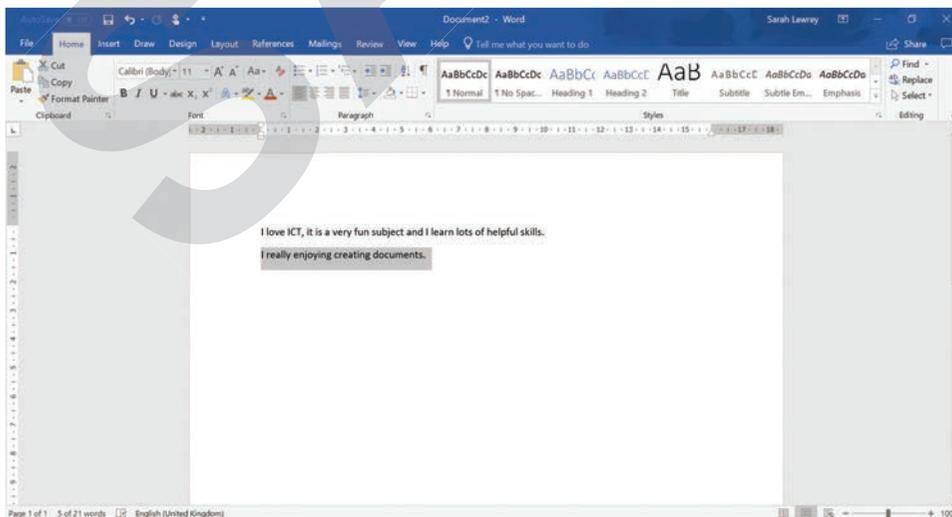
To delete text one letter at a time, move the cursor to the right side of the letter that you want to delete and click the left mouse button once. You should see that the cursor is now next to the letter.

Now press the backspace key and you will see that the letter has been deleted. If you keep pressing the backspace key, more letters will be deleted, one by one.



To delete text one word or sentence at a time, select the word or text first. To select text, move the mouse pointer to the right side of the word or sentence that you want to select.

Click and hold down the left mouse button. Move the mouse cursor to the left, to the beginning of the word or sentence that you want to select. Stop clicking the left mouse button now and you should see that the word is **highlighted**. You will be able to tell that it is highlighted as it will have a different colour background.



Can you tell which text is selected here?

Key words

Edit: this is when you make changes to text.

Delete: this is when you remove text.

Tip

You can also select a full word by moving the mouse pointer over the word and double-clicking the left mouse button. This will select the full word all at once.

Key word

Highlight: this is when the background colour behind the text changes because you have selected the text.

Key words

Menu: this is a box that opens on the screen that gives you a list of options to choose.

Cut: this is when you store the text that you have selected to the clipboard. The text is also removed from the page you do this on.

Clipboard: this is a special storage area on the computer where any text that you cut or copy is put until you need to paste it.

Paste: this is when you put the text that you copied onto the clipboard back onto the page.

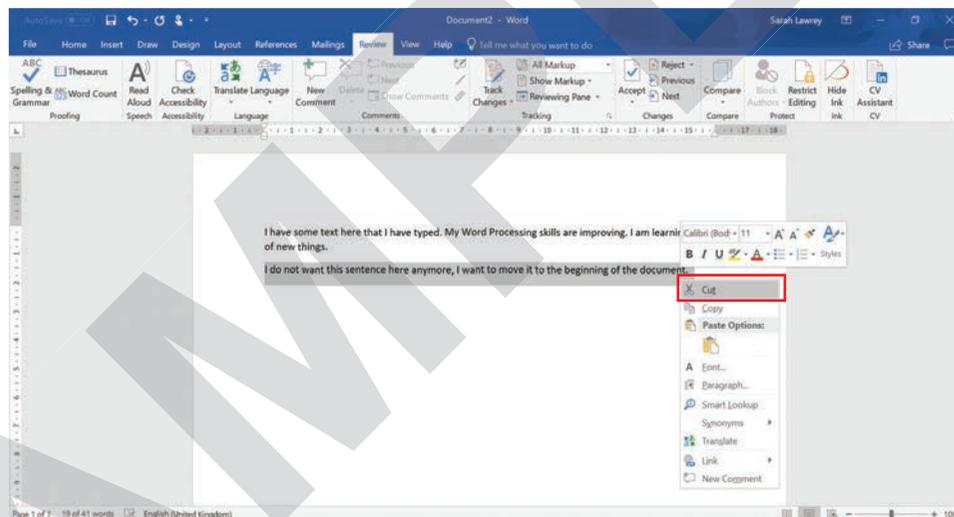
You can now press the backspace key to delete the selected text.

You can also select a whole word by putting the mouse pointer anywhere in the word and double-clicking the left mouse button.

Moving text

Sometimes you might have typed some text into your document, but then you decide that it is in the wrong place. You can move text easily if you do this.

To move text, you need to select the text first. When you have selected the text, click the right mouse button. This will open a **menu**. Click on the option 'cut' in the menu using the left mouse button. This will then remove the text from where it was.

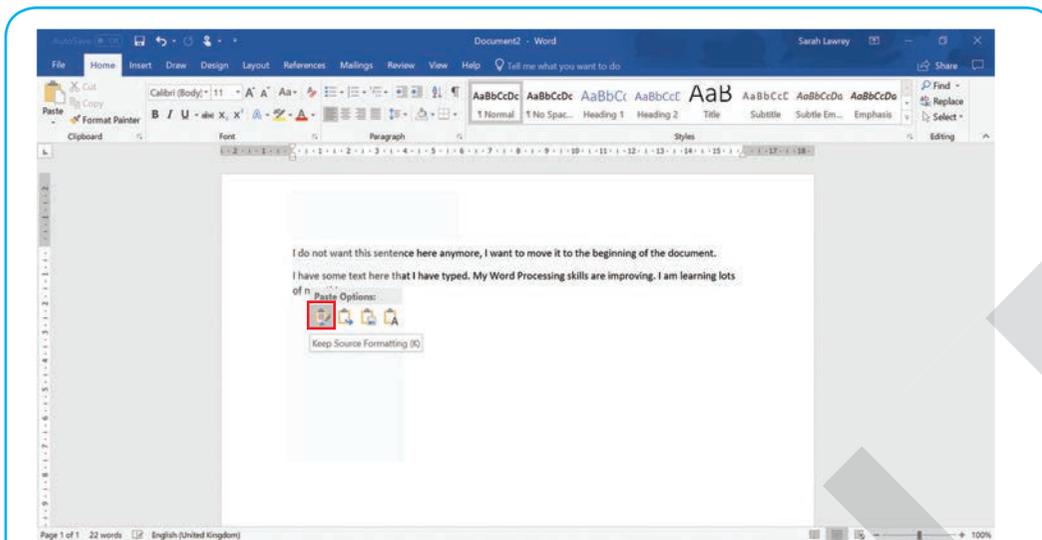


The text has been stored in the computer's **clipboard**. You can now put this text in its new place.

To do this, move the cursor to the place that you want to put the text and click on the right mouse button. This will open the menu again.

Click on the left mouse button and the first option under the 'Paste Options'. You will now see the text appear in the new place.

1 Starting with text



Key word

Copy: this is when you store the text that you have selected to the clipboard. The text is not removed from the page when you do this.

If you have the same text that you want in two different places, then you can use similar instructions to the cut and paste options, but instead of choosing the option 'cut', you choose the **copy** option from the menu. This will not remove the text like the cut option, but it will copy the text onto the clipboard.

You can then paste the text in the different place that you wanted it.

Activity 3.1

Delete the word 'fun' letter by letter from your document and type the word 'exciting' in its place.

Activity 3.2

Delete the word 'helpful' as a whole word from your document and type the word 'useful' in its place.

Activity 3.3

Type the following sentence into the end of your document:

'I will move this sentence to show my new word-processing skills.'

Move the sentence that you have just typed to the beginning of the document.

Activity 3.4

Type the following sentence into the end of your document:

'I want to copy this sentence to the beginning of my document.'

Copy the sentence that you have just typed to the beginning of the document.



Key words

Ribbon: this is the area at the top of the page where you can find all the buttons that you can use.

Print: this is what you do to make a paper copy of the document.

Skill 4

Selecting basic buttons

There are lots of buttons that you can see in the document. You will find most of the buttons across the top of the window, above the page, on the part of the screen called the **ribbon**. This is the strip that you can see across the top of the screen. A button could be a little image, or it could be a word. It could also be a word and an image together. There are some buttons that you need to be able to use. These are **spell check, Print** and **Save**.

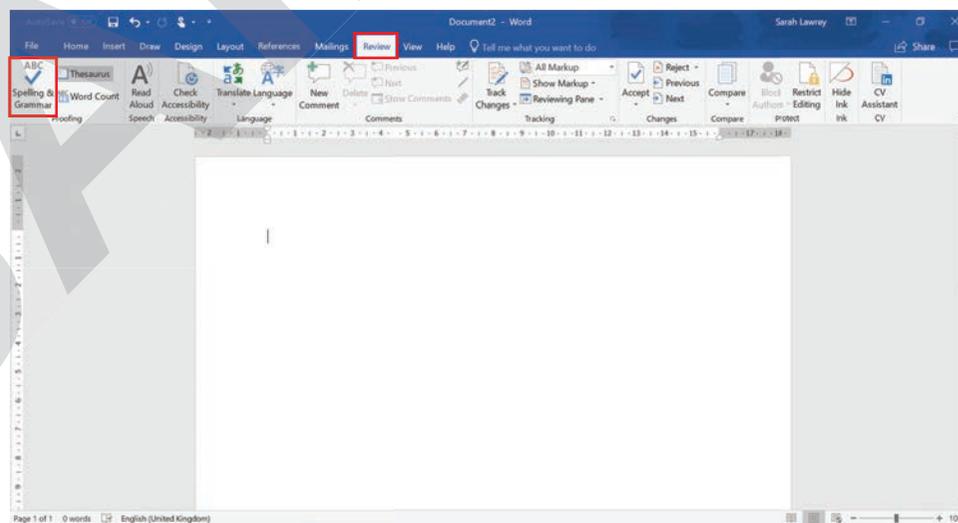
If you look at the top of the ribbon, you may see lots of different words such as **File, Home, Insert, Draw** and **Design**. If you click on each of these words you will open a different tab on the ribbon.

The ribbon has different tabs as it would be extremely difficult to fit all the buttons into one area. Each tab has different buttons to make it easier for you to see them.

Spell check button

When you have typed out text into a document, you should spell check it to see if any words have an incorrect spelling. You can use the Spell check button to check the spelling of the text you have typed.

You can find the spell check button on the **Review** tab. It is usually called 'Spelling & Grammar'.



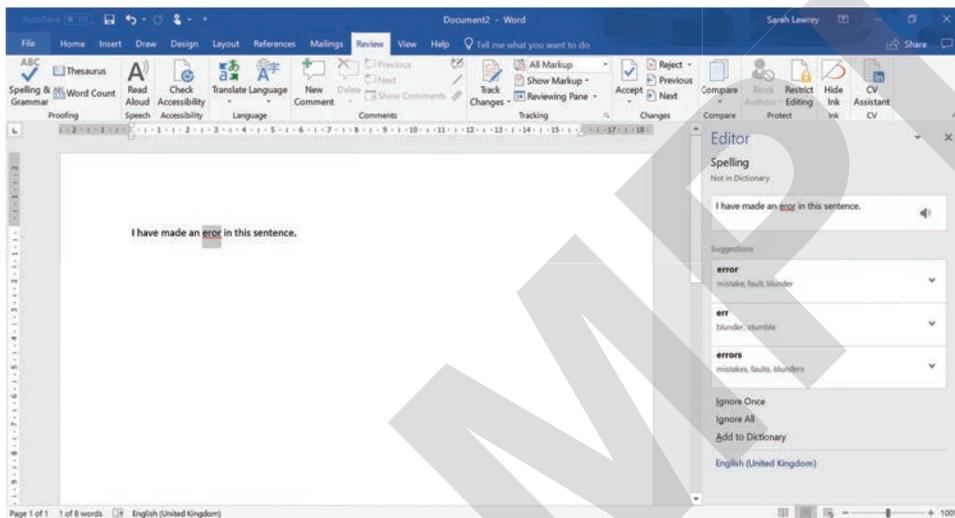
To start a spell check on your document, make sure the cursor is at the start of the document, then click the **Spell check** button.

1 Starting with text

If there are no spelling errors in your document, the spellchecker will tell you that it has checked everything and that no errors were found.

If the spellchecker finds a spelling error in your document, it will open an editor **window** at the right side of the screen. In the window you will be able to choose the correct spelling for the word that you wanted to type.

To choose the correct word, just click on it with the left mouse button. The spellchecker will then move on through the document to the next spelling error, if there are any more.



The spellchecker will also check your grammar. So, you may find that it will sometimes give you corrections for this as well.

If you want to close the window when you have finished, click on the cross in the top right corner of the window. Don't click on the cross in the top right corner of the screen as this will close your document completely!

Print button

When you have finished typing your document, you might want to print it out. This could be to store it away for another day, or to give a copy to someone, like your teacher.

To print the document, you will use the **Print** button. You can find the **Print** button on the **File** tab.

Click on the **File** tab, then click on the 'print' option. This will open a print window that will show you the document that you want to print.

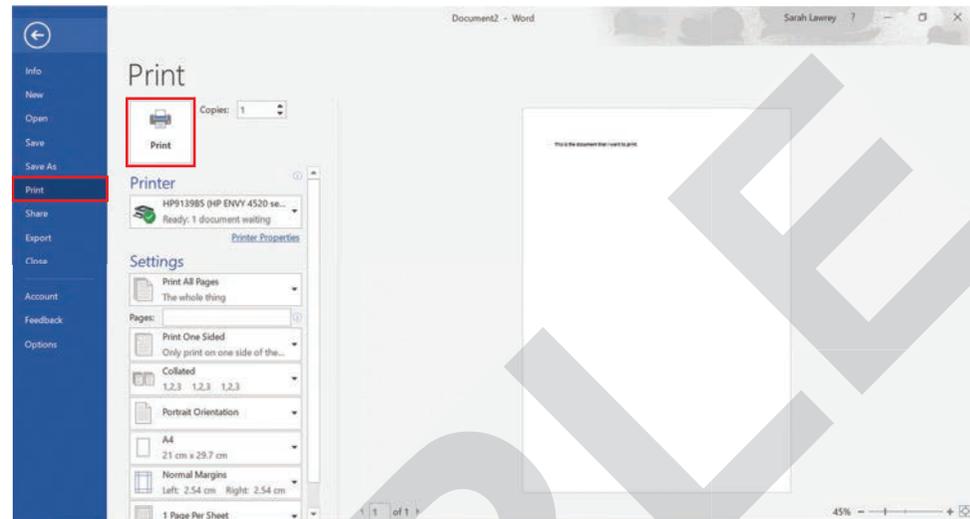
Key word

Window: this is a box that opens up on the screen that gives you options to choose from.

Tip

You can sometimes tell that you have made a spelling error as a word will have a wiggly red line underneath it. Can you see that in the image?

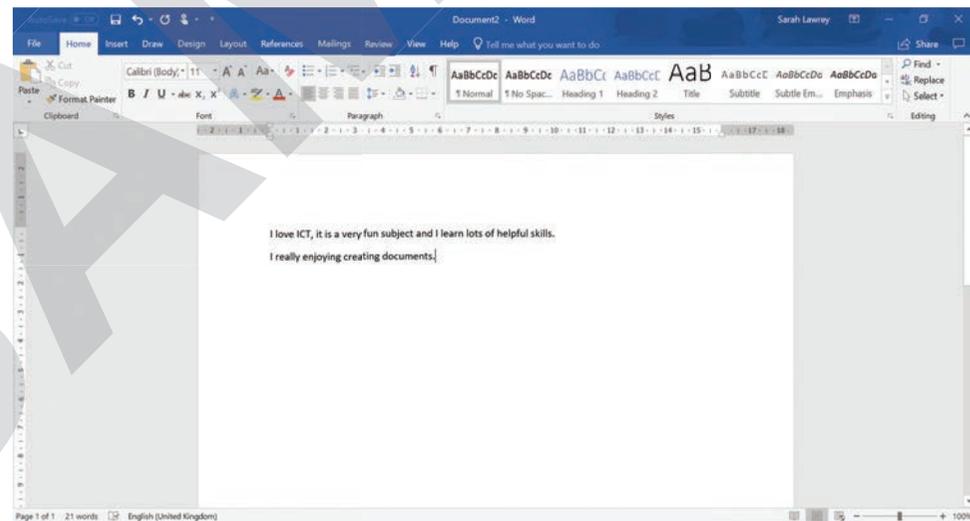
When you are ready to print the document, click on the **Print** button near the top left corner of the screen.



Save button

When you have finished typing your document, you will want to save all your hard work so that you can use it again in the future.

To save your document, you will use the **Save** button. You can find the **Save** button above the ribbon in the top left corner of the screen.

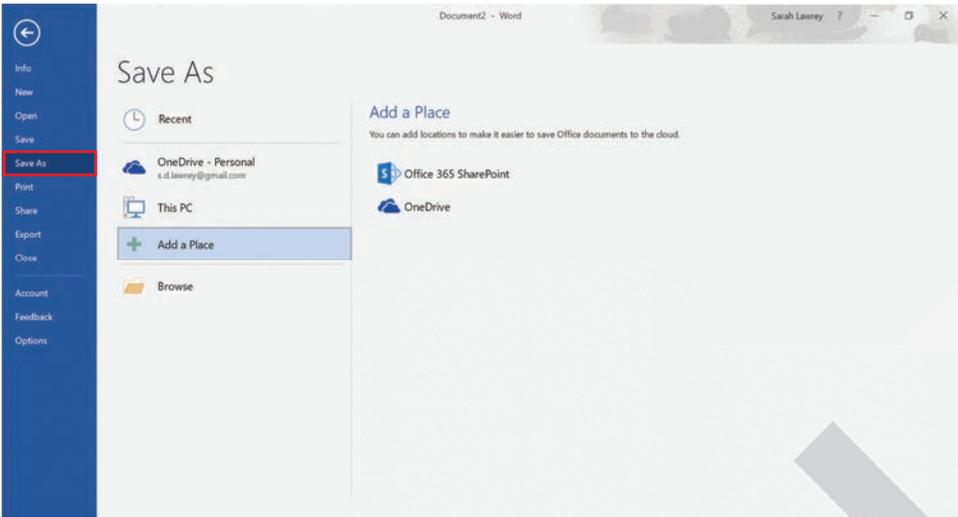


Click on the **Save** button and this will save your document. If it is the first time that you are saving the document, the screen will change to a different window called the **Save As** window.



WATCH OUT!

You should click on the **Save** button regularly when you are word processing, to make sure that you do not lose any of your great work.



The screenshot shows the 'Save As' dialog box in Microsoft Word. The title bar reads 'Document2 - Word' and the user's name 'Sarah Lawrey' is visible. On the left, a blue sidebar contains menu options: Info, New, Open, Save, Save As (highlighted with a red box), Print, Share, Export, Close, Account, Feedback, and Options. The main area is titled 'Save As' and is divided into two panes. The left pane, labeled 'Recent', lists 'OneDrive - Personal' (s.l.laurey@gmail.com), 'This PC', 'Add a Place', and 'Browse'. The right pane, labeled 'Add a Place', includes the text 'You can add locations to make it easier to save Office documents to the cloud.' and lists 'Office 365 SharePoint' and 'OneDrive'.

Choose the place where you want to save the file, then type a suitable filename in the box that says 'Enter filename here'. You will learn how to choose a suitable filename in the next skill section. When you have typed a filename, click **Save**. You may find that Microsoft Word automatically puts the first line of text in your document as a filename. You will need to delete this and type in the suitable filename that you want to use.

Once you have saved the file for the first time, you can click on the **Save** button at any time and save it again. You won't need to type a filename each time, it will save using the first one that you typed.

Activity 4.1
Open the file 'Letter.doc' that your teacher will give you. Spell check the letter to see if there are any errors.

Activity 4.2
Explain to a friend or your teacher how you would print the letter.

Activity 4.3
Save the file using the **Save** button.



Saving documents with a suitable name

When you name a document, you need to make sure that you can quickly find that document again if you need it. This means that you should choose a name that will remind you what is in the document, without having to open it to check.

The name 'My_Letter' will remind you it is a letter, but it doesn't give you any more detail about it. If you have many letters saved, you may struggle to find it again. You also do not want your document name to be too long.

You should choose a name for your document using the following guidelines:

Make sure that it:

- is not too long
- is detailed enough to tell you what is in the document
- does not contain any spaces.

Spaces in a filename make it difficult for some software to read the filename, so this is why you shouldn't use them. Instead of a space, you could use an underscore. This is a small line that can be typed between each word, for example My_Letter. See if you can find the underscore character on your keyboard.

Activity 5.1

You are saving a document that is a letter you have written to your friend. The letter tells your friend about your new word-processing skills. You thought about saving the letter as 'My_Letter' but realise this is not a good filename.

Which of the following filenames would be an improvement? Why would it be an improvement?

MyLetterToMyFriendAboutWordProcessing

Letter_About_WP

LetterToFriend

Why would it be an improvement? Write down your reason.

Why are the other filenames not as good? Write down your reason.

Skill 6



Proofreading text

You have already spell checked your letter, but you can also **proofread** your document to make sure that it has no errors in it.

When you are proofreading you need to think about the following:

- Are all the words correct? Sometimes you may not have misspelt a word, but it might be an incorrect word. For example, you might have wanted to write 'it was a beautiful scene' but instead you typed 'it was a beautiful seen'. The word 'seen' is spelt correctly, but it is not the word that you intended to type.
- Is all the punctuation correct? For example, do all the sentences have a full stop at the end or other appropriate punctuation?
- Are capital letters used correctly? For example, do all sentences and proper nouns (such as a person's name) start with a capital letter?

You can proofread a document on screen, or you can print it out and proofread it.

Activity 6.1

Open the file 'Proofread_Me.doc' that your teacher will give you. Proofread the file, using the guidelines, to see if you can spot any errors. Correct any errors that you find.

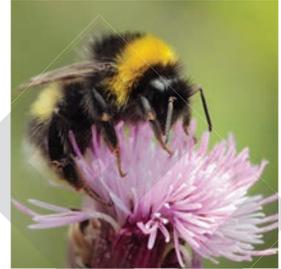
Key word

Proofreading: this is when you read through all the text in a document to see if you can find any mistakes.

Scenario

Bee survival

You have been asked to check a document that your friend has written for a project that you are doing together. The project is about the survival of bees. Your friend has left you with some instructions, including some text that needs editing.



Activity 1

Open the file 'Bees.doc' that your teacher will give you.

Add the following text to the end of the file:

'This is our project about bees. It shows the information that we have learnt about bees and the importance that they have.'

When you have typed the text, move it to the beginning of the document and make it a new paragraph.

Activity 2

Change the lowercase letter at the beginning of the name 'deeraj' to a capital D.

Activity 3

Spell check the document.

Activity 4

Save the document with a more suitable filename than 'Bees'.

Activity 5

Proofread the document to see if it has any more errors in it.

Challenge

You might find that you want to change the name of a file that you have saved to something more suitable.

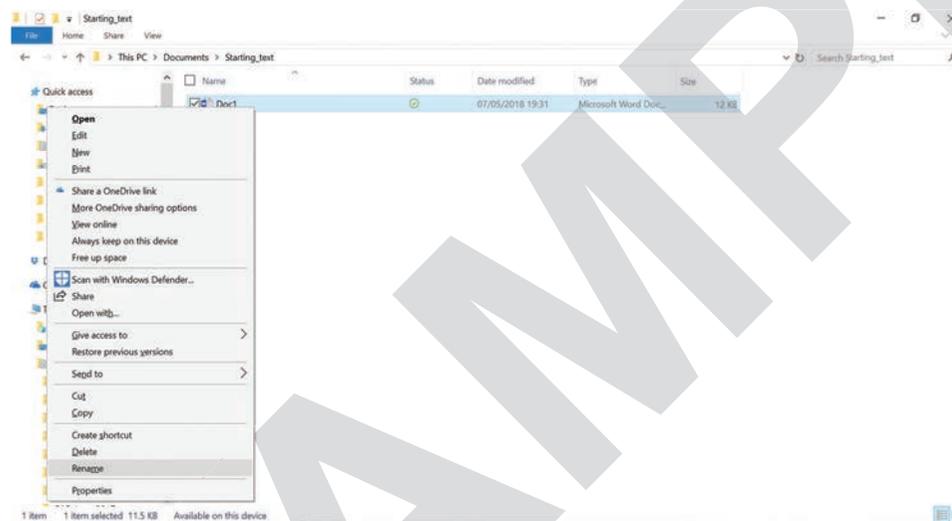
To change the name of a file, you need to find the file in your documents.

Activity 1

When you have found the file, click on the file once with the left mouse button. This will select the file.

When you have selected the file, click once with the right mouse button and this will open a menu.

Select the option 'Rename' from the menu. You will see a black box appear around the filename, and the text will be highlighted.



You can now delete the filename and type a new one.

Final project – Your favourite day!

You have been asked by the team working on your school magazine to write an article about your favourite day. You need to use your word-processing skills to type your article to send to the editor.



Activity 1

Open a new Microsoft Word document and write about your favourite day. Think about the following questions:

- Where did you go?
- What did you do?
- Who was with you?
- What made it your favourite day?

Activity 2

Spell check your document when you have finished.

Activity 3

Save your document with a suitable title.

Activity 4

Proofread your document.

Reflection

- 1 Describe three ways that you will use your new word-processing skills.

2 Describe two ways that you will keep yourself safe when using your word-processing skills.

3 What is good about typing text into a document rather than handwriting it on paper? Write down two benefits.





How to order

Cambridge University Press resources

01223 325 588

educs@cambridge.org

To find your local sales consultant please visit:

cambridge.org/education/find-your-sales-consultant

cambridge.org/education/ICT-Starters

ISBN 978-1-107-98232-1



9 781107 982321 >