

ICT

Chapter 5

Entering, developing and combining information (Part A)

Section A Organising information

1 Templates	3
-------------	---

Section B Page layout

Section C Formatting text

1 Changing the appearance of text	7
2 Changing the layout of text	8

Section D Using images

1 Finding suitable images	10
2 Deciding the best position for images	10
3 Cropping images	11
4 Resizing images	11

Picture Credits

The publisher would like to thank the following for their kind permission to reproduce their photographs:
(Key: b-bottom; c-centre; l-left; r-right; t-top)

Google Inc. 10tr; Mozilla Foundation 10cr; Punchstock Royalty Free Images 10br; Corbis 11tr, 11br; Getty Images 11tr; Alamy Images: Mary Evans 11cr

Every effort has been made to trace the copyright holders and we apologise in advance for any unintentional omissions. We would be pleased to insert the appropriate acknowledgement in any subsequent edition of this electronic product.

ICT

Keith Jeram, Alan Meechan and Alison Meechan

Chapter 5: Entering, developing and combining information (Part A)

- Chapter 1: Using ICT systems
- Chapter 2: Safety and security
- Chapter 3: Sources of information
- Chapter 4: Using ICT-based information
- Chapter 5: Entering, developing and combining information (part A)
- Chapter 6: Entering, developing and combining information (part B)
- Chapter 7: Presenting information
- Chapter 8: Communicating using ICT
- Chapter 9: Test preparation

How to use the Functional ICT materials

These materials have been developed to help you learn the skills that are listed in the Functional Skills Standards for ICT, which the Qualifications and Curriculum Authority (QCA) produced in 2007.

How have these materials been structured?

The chapters follow the standards, and each chapter is divided into sections that cover the individual standards in sequence. You will find the standards at the start of each chapter, although we have adapted the language slightly to make it clear what you are expected to learn.

Just because the materials follow the standards in this way, it does not mean that your teacher will necessarily teach them in this order. They will organise your learning sessions to suit your individual needs.

Who are these materials aimed at?

These materials are for learners working at both Level 1 and Level 2. The content and activities have been written to be accessible to learners at both levels. Your teacher will know which activities are most suitable for you.


In functional skills, the difference between levels is more to do with what you produce than with the activities you are asked to do. The differences are measured by the **complexity** of the activities, your **familiarity** with the context you are working in and the task you've been asked to perform, how **technically demanding** the task is and how good you are at working **independently**. The materials, and their activities, have been developed with this in mind.


We hope that the materials will engage you in the learning process, and give you the opportunity to discuss what you have learned and to see how other learners approach the same tasks.

What will you find in each chapter?

The chapters follow the standards and are divided into sections that cover what is laid out in the standards. Within each section you are asked to 'Learn the skill', which gives you information and facts for discussion and exploration; and you are asked to 'Develop the skill', with activities that let you practise the skills, test your understanding and take your knowledge further.

You will also find two other features on the pages that are designed to increase your understanding. These are electronic resources in the form of 'skills demonstrations' and 'assets'.

 Skills demonstrations are screen-based demonstrations of points made in the text, which you can click on for instruction or information.

 Assets are files of information provided or stored digitally, which may include photographs, sound clips, databases, spreadsheets, etc. These may also include material you will need to perform the activities (e.g. tables to complete).

We hope you find it easy to learn from these materials and that you enjoy using them.

Published by Pearson Education, Edinburgh Gate, Harlow CM20 2JE © Pearson Education 2008





All rights reserved. This material may be used only within the Edexcel registered Functional Skills Pilot Centre or Functional Skills Development Programme Centre that has retrieved it, in which case it may be desk printed and/or photocopied for use by learners within that institution; otherwise no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanic, photocopying, recording or otherwise without either the prior written permission of the Publishers or a licence permitting restricted copying in the United Kingdom issued by the Copyright Licensing Agency Ltd, Saffron House, 6–10 Kirby Street, London EC1N 8TS, UK.

First published 2008.





Typeset by Oxford Designers & Illustrators, Oxford

5 Entering, developing and combining information (Part A)

By the end of this chapter you should be able to:

-  enter, develop and format information to suit its meaning and purpose
-  use software facilities to control page layout
-  select and format appropriate text
-  obtain and manipulate images that are fit for purpose

You will learn to:







-  enter, organise, develop, format and refine information, using various editing techniques, to meet your needs
-  structure and lay out information in a document, using headings, lists, tables and templates, to meet your needs
-  use bullets, alignment, colour and font styles
-  insert, size, crop and position images

A Organising information

Learn the skill

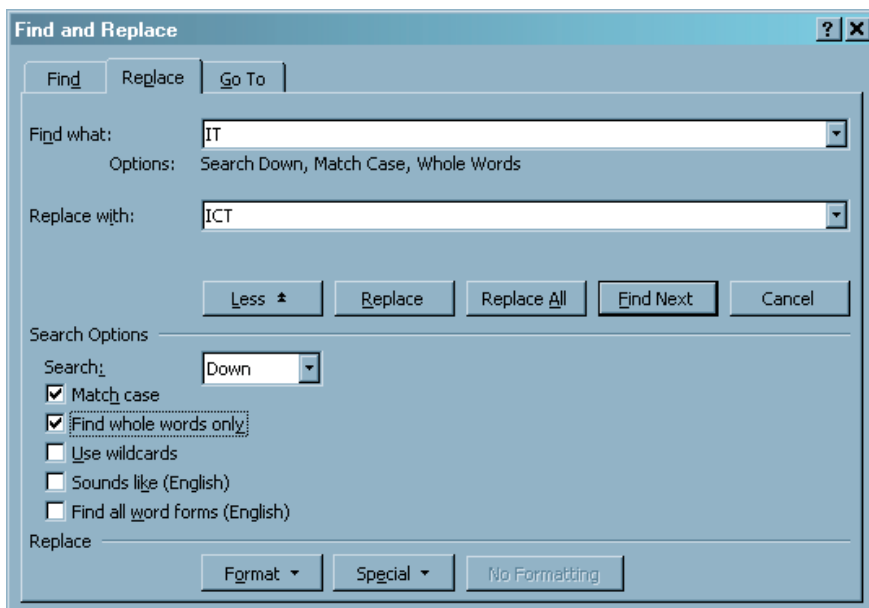
Information presented on a printed page, or on a screen, needs to attract and hold the user's attention. A page will often have a combination of text and graphics. These are the **page elements**. The elements must be organised on the page so that they work well together. This is **page layout**.

There are editing techniques that will help you design and structure your information. Look at these skills demonstrations.

-  Format text
-  Enter and amend text (Drag & drop)
-  Use lines and borders
-  Headings
-  Undo/redo
-  Wrap text

Some forms of text, such as reports, can be very long. If you want to shorten them, a useful editing tool is 'find and replace', which can be used to automatically find and replace all occurrences of a word or phrase in a document.

This 'Find and Replace' dialog has been set to replace 'IT' with 'ICT'.



Clicking the 'Replace All' button will automatically replace 'IT' with 'ICT' everywhere it appears in the open document.

Notice that the 'Match case' and 'Find whole words only' checkboxes are checked.

In this particular case, why is it important that these checkboxes are ticked?

Templates

Template files provide the basic structure and format for different types of document; they are very useful and can save a lot of time. Templates also help to ensure that formal documents are produced with a consistent structure.

Many companies will use templates of their own design for things like letters and memos. Any document can be saved as a template file by saving it with the correct file extension: Microsoft Word template files use the extension *.dot*; document files use the extension *.doc*.

To use a template, first open it, and then use 'Save As' to save it as a document file with a new name (it's important to do this so as not to overwrite the template file). Be careful to select the correct document filename extension in the 'File Save As' dialog.


Use the Help file in your word processor to find out if it provides document template files and, if so, where they are stored. If you are using Microsoft Word, you may find they are stored at C:\Program Files\Microsoft Office\Templates.



If available, open a template file for a formal letter and one for a report. Be careful to select the correct template filename extension.

Explore the structure that is provided in the template for the user's own content.



Develop the skill

- A1  Open the file. Complete the paragraph by dragging and dropping one word from each column into the spaces provided in the text below the table.




Mary has been very ill recently but she is < > getting better. She still spends a lot of time < > and is still not enjoying her < >.

- A2 Practise your skills by typing the following text into a word-processing application. Save your work when you have finished.

'The Widow Douglas she took me for her son, and allowed she would sivilize me; but it was rough living in the house all the time, considering how dismal regular and decent the widow was in all her ways; and so when I couldn't stand it no longer I lit out. I got into my old rags and my sugar-hogshead again, and was free and satisfied. But Tom Sawyer he hunted me up and said he was going to start a band of robbers, and I might join if I would go back to the widow and be respectable. So I went back.'

- Correct the spelling of the word 'sivilize' to 'civilise'.
 - Use the 'Enter' key to insert two line breaks before the sentence starting with 'I got into my old rags ...'.
 - Select all the text and set the font to Verdana, 12 point.
 - On a line above your text, enter the heading 'From Adventures of Huckleberry Finn'.
 - Format the heading to Verdana, 14 point, Bold, Centred.
 - Format the heading to have a 6 point space after it.
- A3  Open the Chocolate.doc file. Use the 'Find and Replace' dialog to replace all instances of the word 'Cocao' with 'Cocoa' (this is the modern spelling). How many changes are made?
- A4  Open the provided template file *Table 4 by 12.dot*. Save the template as a document file with the name *Animal questions*.

Format the table in the template so that it is similar to the example below. Drag and drop the text below the table into the table so that it appears as below.

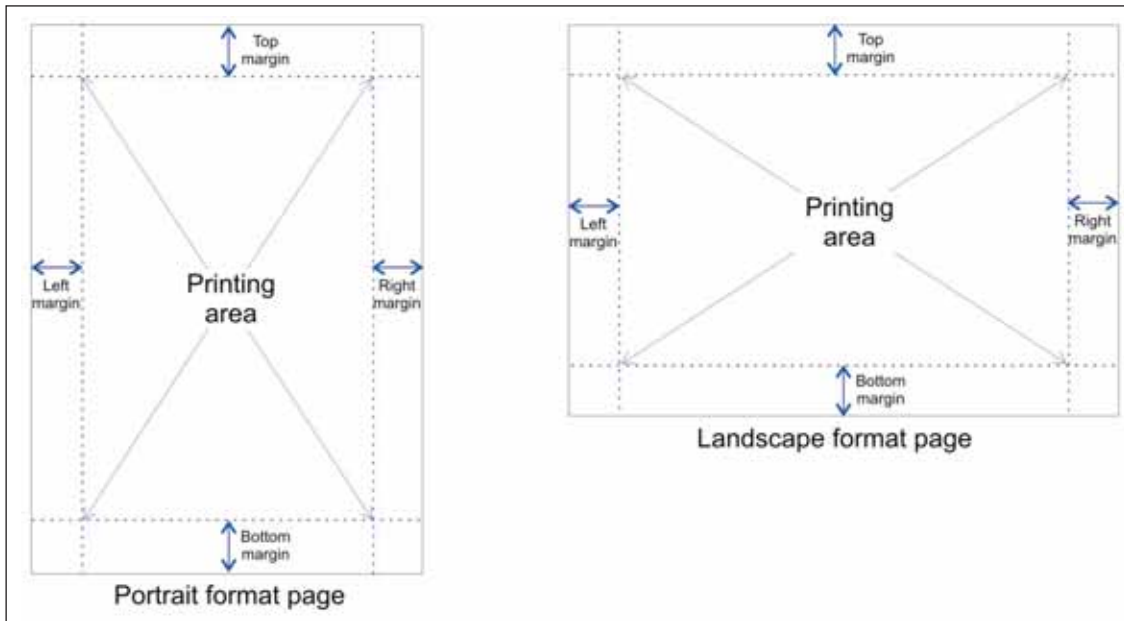
			
Whales are mammals			
Cows are carnivores			
Apes have long tails			

Now drag and drop the 'tick' character into one cell in each row to show the correct answer for each statement. While you drag and drop the 'tick' character, hold down the Control (ctrl) key with your other hand. This will make a copy and leave the original in place.

B Page layout

Learn the skill

A page is made up of separate areas. Here are two pages, one in portrait format and one in landscape format.



➤ The width and the height of the margins are set using a page setup dialog box. They should not be set to zero, as most printers cannot print to the edge of the page.

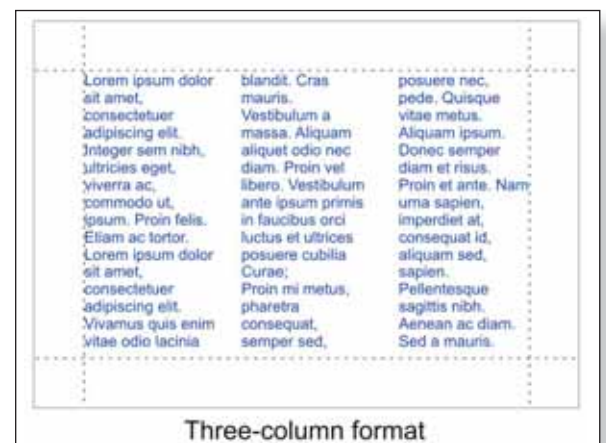
➤ Page formatting features

Text starts on the page below the top margin. Text that would extend below the bottom margin *breaks* to the next page. Text and pictures are usually put within the margins; they *can* be set to extend into the left or right margins, but should not go outside the area that can be printed.

The top and bottom margins are used to contain the *header and footer*. These are usually small amounts of text, and/or a small graphic, which appear automatically on each page. The footer can include the page number and date.

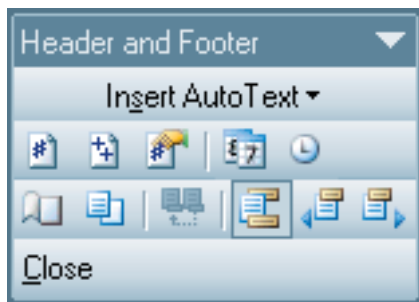
➤ The printing area of the page can be organised in **columns**. This picture shows text in three columns. The text continues (flows) from the bottom of one column to the top of the next.

The vertical space between columns is known as a *gutter*. Sometimes a vertical line is shown in the gutter.




Develop the skill

- B1** Open a new blank document using your word processor. This will have default page layout settings. Make sure the document view is Print Layout, so that you see the page on the screen as it will appear when printed. In Microsoft Word, the page view settings are in the View menu.
- Open the Page Setup dialog (in Word this is in the File menu). Use the dialog to set up an A4 size landscape format page with 2.5cm margins all round.
 - Open the Columns Format dialog (in Word this is in the Format menu). Use the dialog to set up three columns with a gutter width of 1.5cm (spacing) and a vertical line.
 - Open the view Header/Footer dialog (in Word this is in the View menu and it looks like this).



This will open the top margin and allow you to enter a header (usually a small amount of text and/or a small graphic). Enter the text 'Page header'.

Scroll down the page so that the footer area is visible. Click in the footer (again, this is normally a small amount of text, often with the page number) or use the icon on the toolbar. Click on the 'insert page number' button  in the dialog to insert the page number. Close the Header/Footer dialog.

- With your cursor anywhere on the page (except the header/footer), press Ctrl+Enter to enter a page break and create a new, empty page. Do this a few times. Look at the header on each page – the same text should appear on each page. Look at the footer on each page – the page number on each page should be one greater than the previous page.
- Edit the page footer on any page to include the date. Check that the date now appears on all pages. You might want to save this document as a three-column template file.

Hint You may need to copy and paste some text into the columns for the gutter line to show. This will also show you how text flows from one column to the next.

Hint There is a button on the Header/Footer dialog that will automatically enter the current date.

C Formatting text

Learn the skill

Changing the appearance of text

Two important things that decide how easy text is to read are the **font** and the **font size**.

Fonts

Fonts are usually identified by name. Here are three very different fonts.

The name of this font is Book Antiqua. Fonts similar to this are often used in books and magazines.	The name of this font is Curlz. Fonts like this are used for small amounts of text to create special effects.	THE NAME OF THIS FONT IS FELIX TITLING AND IT HAS CAPITAL LETTERS ONLY. FONTS LIKE THIS ARE USED FOR MAIN HEADINGS AND TITLES.
---	---	--

Font size

A large amount of text will not be easy to read if the font size is too small. These three examples use the same font, but in different sizes.

5 points will be quite hard for most people to read easily without a magnifying glass.

10 points should be easy to read for most people and makes good use of space.

15 points may be used in 'large-print' books for people with eyesight problems, but large print can look quite ugly and is very wasteful of space.

Text alignment

The appearance of text is also affected by how it is aligned and by the spacing between the lines.

For text that doesn't have that many words to the line, left alignment works best. Right alignment and centred are not as easy to read, because each line starts from a different position. Justified text, where each line is made the same width by adjusting the spaces between letters and words, gives very varied spacing in narrow columns and is more difficult to read.

Adjusting the spacing between lines is often done to make text fit a given space. The standard line space is single. Reducing the line spacing can make text more difficult to read.

Aligned left When a cat is dropped, it always lands on its feet, and when toast is dropped, it always lands with the buttered side facing down. I propose to strap buttered toast to the back of a cat; the two will hover, spinning inches above the ground. With a giant buttered cat array, a high-speed monorail could easily link Edinburgh with London.	Aligned right When a cat is dropped, it always lands on its feet, and when toast is dropped, it always lands with the buttered side facing down. I propose to strap buttered toast to the back of a cat; the two will hover, spinning inches above the ground. With a giant buttered cat array, a high-speed monorail could easily link Edinburgh with London.
Centred When a cat is dropped, it always lands on its feet, and when toast is dropped, it always lands with the buttered side facing down. I propose to strap buttered toast to the back of a cat; the two will hover, spinning inches above the ground. With a giant buttered cat array, a high-speed monorail could easily link Edinburgh with London.	Justified When a cat is dropped, it always lands on its feet, and when toast is dropped, it always lands with the buttered side facing down. I propose to strap buttered toast to the back of a cat; the two will hover, spinning inches above the ground. With a giant buttered cat array, a high-speed monorail could easily link Edinburgh with London.

50% line spacing

When a cat is dropped, it always lands on its feet, and when toast is dropped, it always lands with the buttered side facing down.

I propose to strap buttered toast to the back of a cat; the two will hover, spinning inches above the ground. With a giant buttered cat array, a high-speed monorail could easily link Edinburgh with London.

Text style

Font styles such as **bold**, *italic* and underlined are used to give emphasis to small amounts of text. Regular font style is best for large amounts of text.

Text colour

Colour can also be used to bring text to life. Use it with care, though, as it generally makes the text less easy to read.

Changing the layout of text

Bullets and numbering

Bullets can make a list of points easier to read. Make sure that all the bullets in a list are consistent and in line.

If a list is meant to be read in a particular order, it will make more sense to number the points rather than use bullets.

During the day participants can try out lots of activities:

- Abseiling
- Orienteering
- Canoeing
- Disco dancing
- Swimming
- Beginners' snowboarding

The choice is theirs.

Results of girls' 100m race

- 1 Janice Watson
- 2 Aisha Khan
- 3 Cheryl Penn
- 4 Kate Roberts
- 5 Kelly Dodd
- 6 Angela Cheung
- 7 Sharika Maheswaran

Tables

Tables are formed from **rows** and **columns** of **cells**. The table below contains 32 cells organised in 8 rows and 4 columns. In this table, each cell has an outline border.



	Day	9 am	12 pm	3 pm
Monday		12°C	15°C	22°C
Tuesday		16°C	20°C	26°C
Wednesday		16°C	19°C	24°C
Thursday		14°C	18°C	20°C
Friday		15°C	20°C	25°C
Saturday		14°C	20°C	22°C
Sunday		14°C	21°C	25°C

This table shows daytime temperatures for a week. The table layout makes it easy to find the information for any day and time.

If you enter text into a table cell, it will automatically move – wrap – to the next line without you needing to press the Enter key (this is called **Text wrap** or **Word wrap**). A cell will automatically expand downwards to allow multiple lines of text to be entered.

Hint To select all the text in a document, click at the beginning of the text and then press the keys Ctrl+Shift+End together.

 **Develop the skill**

- C1**  Open the *gardener.doc* file. From the list of fonts available, choose a font and font size that you consider easy to read and apply it to all the text in the file.
- Find the plant word 'Agapanthus' and give it the Italic font style. Find the phrase 'garden design program' and give it the Bold font style.
 - Select a font to use for the title and headings in the document that is different from the font for the main text. Then choose **one** suitable font style (such as bold, italics or underlined) for the title and headings.
 - Repeat the work, experimenting with different fonts and font styles. You may also want to try using a colour for the title and headings.
- C2**  Open the file *small garden animals.doc*. Select the list of animal names and format it to display as a bulleted list.
- On a new line below the list, enter the text 'I like these animals in this order'. Make a copy of the animal list below the new text. Remove the bullets from this list.
 - Drag and drop the animal names into the order in which you like them. For example, if you like butterflies most and slugs least, then butterflies should be at the top of the list and slugs at the bottom.
 - Format the list as a numbered list from 1 to 13. Then delete the sixth animal from the list. If you have formatted the list correctly as a numbered list, the numbers below the deleted line will adjust automatically.
- C3** Open a new document in your word processor and create an empty table with three columns and four rows.
- Enter some text into the first cell in the table. Note what happens when the text exceeds the cell width.
 - Click in the last cell in the table. Now press the Tab key and note what happens.
 - Click in any cell in the table, apart from the last one. Now press the Tab key and note what happens.
 - Click in the text in the first cell in the table. Now press the keys Ctrl+Tab together and note what happens.

Hint The easy way is to select the list, then click on 'None' in the bullets dialog box.

Hint Look in the Insert or Table menu for an 'Insert table' option. This will open a dialog box allowing the number of rows and columns to be entered. Click OK to insert the table.

D Using images

Still images, such as photographs are great for websites, video presentations and simulations. They can be good for:

- getting across a message or telling a story, especially if the message has a strong emotional content
- creating a particular mood or atmosphere
- highlighting key points

Images are one of the most effective ways of breaking up lengthy pieces of text – but only if they are appropriate and relevant.



Learn the skill

Finding suitable images

Many people start looking for an image by using a search engine such as Google, which has an 'image search' facility.

There are, however, drawbacks to this. Often search engines don't distinguish between copyright and non-copyright images. Most of the images you will find are likely to be protected by copyright. It is also likely that many of them are too small or of poor quality.

Creative Commons (see picture) is one good source of images but you can also find 'public domain' images. These are images that are not protected by copyright law. You can use any public domain image (or other type of asset that is in the public domain), although you still need to acknowledge where the image came from. Many software packages include images that you can use as long as you own a licensed copy of the software.

Take care that an image is still effective when printed – that its size and quality are suitable. If you are printing in black and white, make sure that colour images print clearly.

Creating digital images is easy, but making sure they are fit for purpose takes a little longer. You can take photographs with a digital camera or mobile phone, or use a scanner to capture pictures, artwork, maps and diagrams, which you can then edit.

Deciding the best position for images

When using images and text together, each image must relate to the text nearby, but there should be enough space around the image to separate it from the text. You may want to wrap text around an image, but check that the text is not so broken up that it is difficult to read.



Think carefully about your audience and purpose when deciding on the composition of your pictures

Cropping images







If you want to use only a part of an image, you would use the crop tool. In this photograph the area containing the seagulls was selected and then the image was cropped.



Resizing images


Resizing a picture allows you to make it bigger or smaller. You must be careful to keep the proportions correct or you will end up with a squashed or stretched image that is not fit for purpose.

Look at these skills demonstrations.

-  Import and position images
-  Use Clipart and library images
-  Download images from the internet
-  Crop and resize images
-  Align text and images
-  Optimise images




Develop the skill

 **D1** Use the text on Huckleberry Finn (from either the one you created in section A or the asset here). Insert the picture *huck finn.jpg* into the text. Drag the picture to roughly the centre of the block of text. Format the picture so that the text wraps tightly around it. If necessary, drag the picture to a position where it is completely surrounded by text.



D2 Compare a wmf format clipart image file from the Microsoft website with a jpg or bmp clipart image. What happens when you increase the size of each type of image (by dragging a handle)? Which type is most suitable if you want to increase the size of the image on the page?

 **D3** Crop the image below from the right and from the bottom so that the computer monitor, desk and keyboard are hidden.



Hint Use the Format/Picture menu option.

D4 Look at the mountain bike web page. What is wrong with this design?

