

IT Training

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Office 2007

Word

Using Graphics

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INTRODUCTION

This graphics course is aimed at those who have an intermediate knowledge of Word 2007 and want to learn more features.

| Knowledge assumed | |
|-------------------|--|
| | experience of using a computer, for example keyboard familiarity |
| | experience of using Windows |
| | experience in using Word 2007 |

| Areas covered | |
|---------------|--|
| | inserting a graphic object into a document |
| | text wrapping |
| | text boxes |
| | SmartArt |
| | charts |



Document signposts

Instructions for you to type

Bold text

Shortcuts

Reminders



Notes



Exercises



GETTING STARTED

Before you begin, you should take a look at the layout of the Word 2007 window so that you know where to find the tools you will be using.

To see this window you must open Word 2007:

- Double click the **Microsoft Word 2007** shortcut icon on the desktop

or

- Click the **Start** button
- All Programs
- Microsoft Office
- Microsoft Office Word 2007

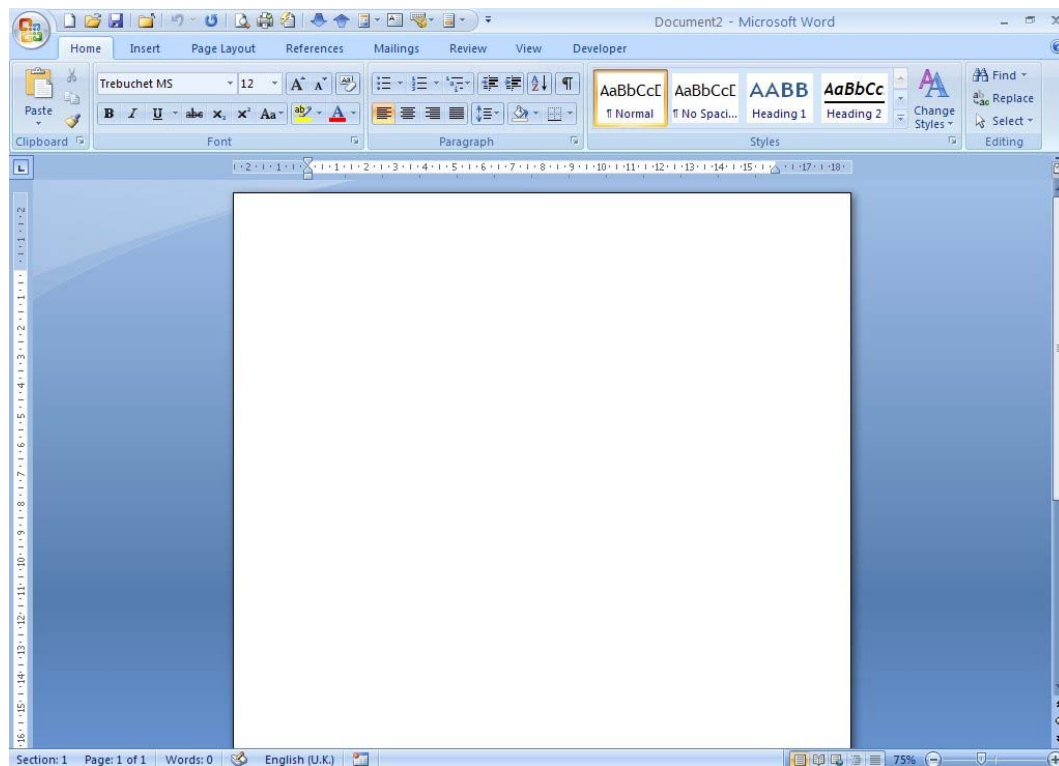


A blank document is automatically opened ready for use.

Microsoft Office
button

Tabs

Ribbon



Status bar

View buttons

GRAPHICS

Graphics include pictures, shapes, SmartArt, and charts.

Pictures are graphics created from another file and include bitmaps, scanned pictures and photos, and Clip Art.

OBJECTS

Information that has been created using a specific program such as drawing software is called an Object. Word tables and WordArt can also be thought of as objects.

As information can be exchanged between Word, Excel, PowerPoint and Access, in some circumstances a selection of data copied from Excel into Word could also be an object.

PICTURES

Pictures may be found in various locations; as part of a picture gallery supplied with Word, in Clip Art, or downloaded from the Internet. Or you might want to include a digital photograph that you have taken, or a photograph you have scanned.

SCANNED AND DOWNLOADED FILES

A picture downloaded from the Internet may be in one of many file formats depending upon how it was originally saved.

You should be aware that there are copyright restrictions, and for further information on the implications you are recommended to check the Library Services site:

<http://www.library.dmu.ac.uk/Support/Copyright/>

If you scan a picture, you will have the option of choosing the format when the object is saved to disk.

Word supports a number of popular graphics formats:

| | |
|----------------------------------|--|
| Windows Metafile Graphics | .emf, .wmf |
| Windows Bitmap | .bmp, .dib, .rle |
| Computer Graphics Metafile | .cgm |
| Graphics Interchange Format | .gif |
| Joint Photographic Experts Group | .jpg |
| Portable Network Graphics | .png |
| Macintosh PICT | .pct |
| Tagged Image File Format | .tif |
| Vector Markup Language | .vml |
| Microsoft Windows Media | .avi, .asf, .asx, .rmi, .wma, .wax, .wav |

For some file types you will need to install a graphics filter. You can find further information from Word Help by searching for 'Types of media files you can add'.

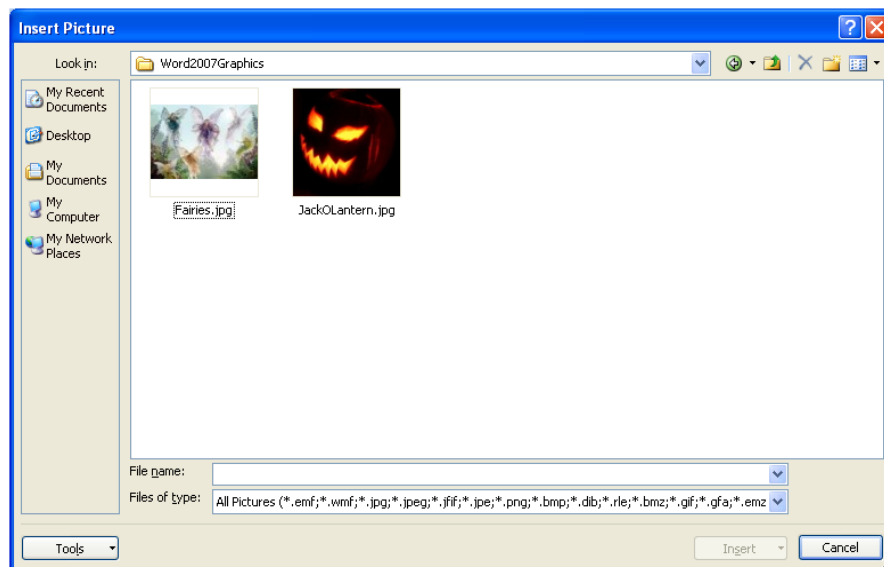
INSERTING A PICTURE INTO A DOCUMENT

Pictures can be saved as files and inserted into your document.

- Open the document called **BelieveInFairies** in the **Word2007Graphics** folder on drive C:
- Position the insertion point on a blank line beneath the first paragraph
- Choose the **Insert** tab
- Click **Picture** in the **Illustrations** group

The Insert Picture dialog box is displayed.

- Select the **Word2007Graphics** folder

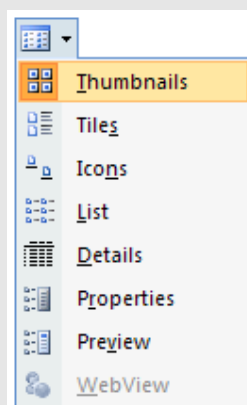


Views

There are two picture files in the folder and you will see their contents previewed in the dialog box.



If you don't see a preview, use the Views button in the dialog box to select Thumbnails.



- Select the picture file named **Fairies**
- Click the **Insert** button
- Use the handles at the corners of the picture to make it a little bigger



Resize handles

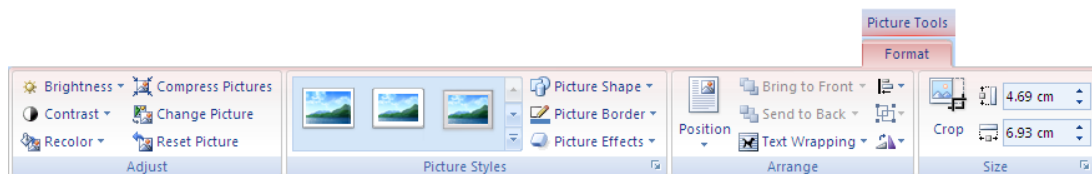
WRAPPING TEXT AROUND A PICTURE

Depending on the layout of the document, you may want the text to wrap around the picture.

- Select the picture

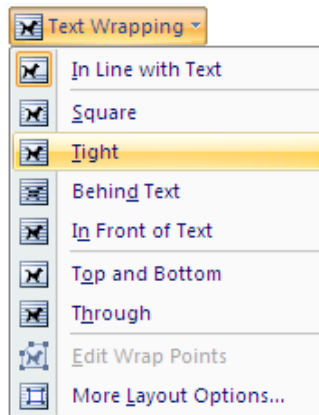
When the picture is selected the Picture Tools contextual tab is displayed.

- Click on the **Format** tab



The Format tab contains all the tools for editing your picture.

- Click the **Text Wrapping** option in the **Arrange** group
- Choose the **Tight** wrapping style



The text wraps around the picture.

- To adjust the position of the picture, point to the middle and drag it into place

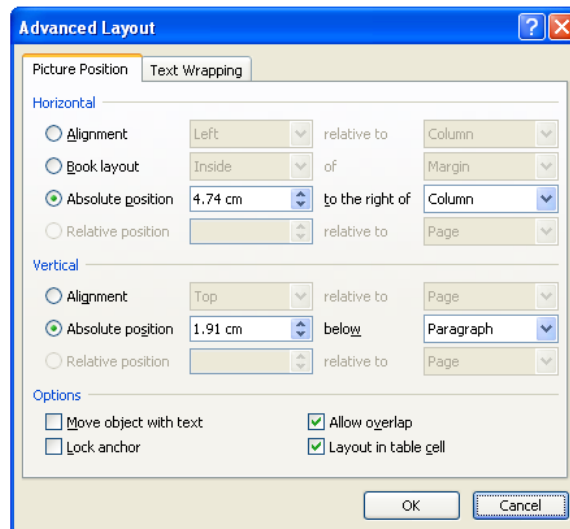


You can make fine adjustments to the picture position using the arrow keys on the keyboard.

- Move the picture to the middle of the text to see the difference in the layout
- Ensure the picture is still selected
- Click **Text Wrapping**

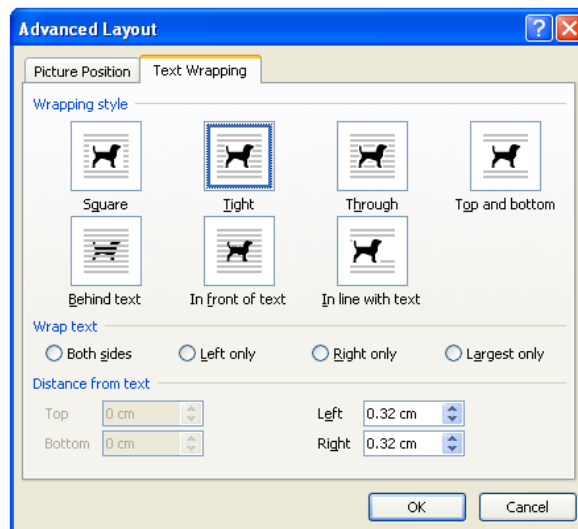
- Choose **More Layout Options**

The Advanced Layout dialog box is displayed.



There are several options relating to the alignment and position of the picture on the page.

- Click the **Text Wrapping** tab



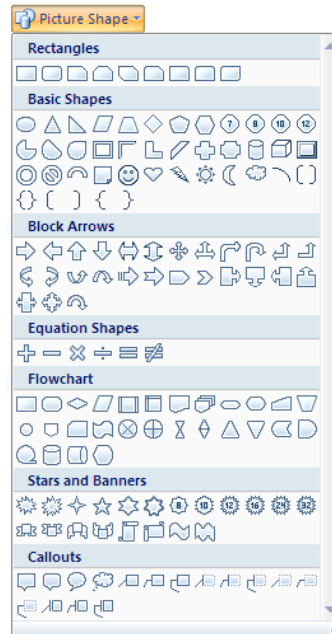
This allows you to change the text wrapping style plus, depending on the style you have selected, you can change the space between the text and the picture.

- Click **Cancel** to close the dialog box

PICTURE SHAPES

- With the picture selected click **Picture Shape** in the Picture Styles group

A gallery of shapes is displayed.



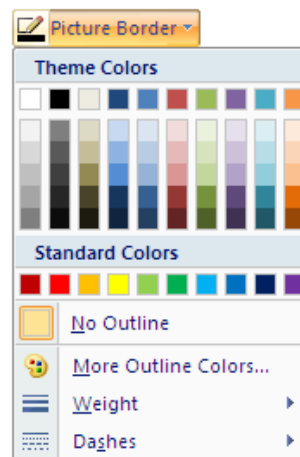
Click on several shapes to see the effect on the picture

- Finally click on the **Rectangle** shape

ADDING A BORDER AROUND THE PICTURE

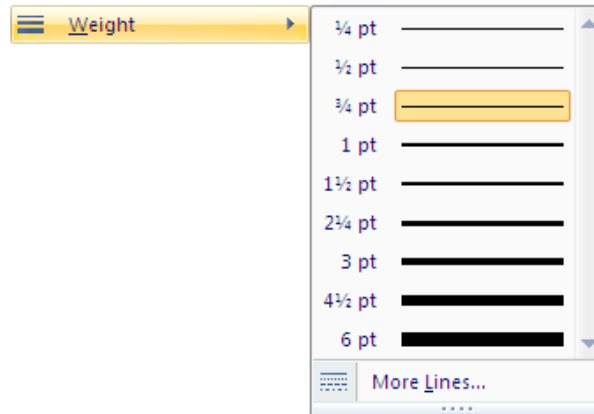
- With the picture selected click **Picture Border**

A colour palette is displayed.



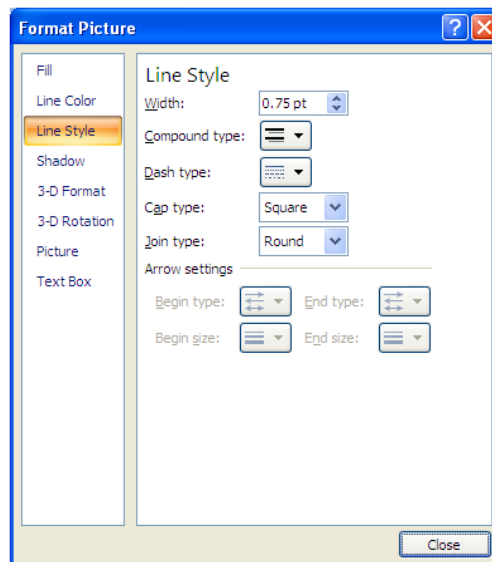
- Move the insertion point over the colours to see the effect of different coloured borders on the picture
- Pick a colour
- Click the **Picture Border** button
- Position the insertion point over **Weight**

A menu is displayed showing different thicknesses for the line.



- Move the insertion point over the lines to see the effect on the border
- Click **More Lines**

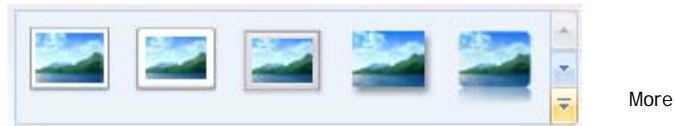
The Format Picture dialog box is displayed.



- **Width:** To specify the width of the line, enter a number in the box.
 - **Compound type:** To apply a style composed of double or triple lines
 - **Dash type:** To apply a style composed of combinations of dashes
 - **Cap type:** To specify the style used for the end of the line
 - Square:* The end of the line is capped with a square shape
 - Round:* The end of the line is rounded
 - Flat:* The end of the line is flat
 - **Join type:** To specify the style used when two lines connect with each other
 - Round:* The corners where the two lines intersect are rounded
 - Bevel:* The corners where the two lines intersect are cut off at a 45 degree angle
 - Mitre:* The corners where the two lines intersect are squared off
- Try some of the options for Line Colour and Line Style
- Click Close

PICTURE STYLES

- Click the **More** button on the Picture Styles group



A gallery of picture styles is displayed.

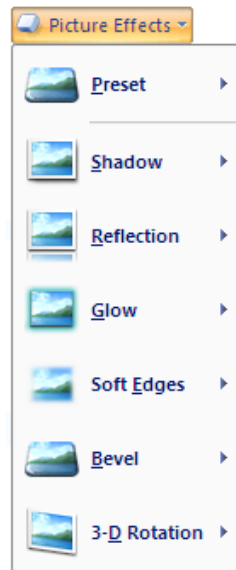


- Hover the mouse pointer over several of the styles to see the effect on the picture
- Choose **Soft Edge Oval**

| | | |
|---|--|--|
| <p>As a consequence, practical considerations of fairies have normally been advice on averting them. In terms of protective charms, cold iron is the most familiar, but other things are regarded as detrimental to the fairies: wearing clothing inside out, running water, bells wort, and four-leaf lore is contradictory, some tales been and in other tales against them. In the most popular is bread, varying tack or a slice of The belief that bread has an ancient one. Bread is hearth, as well as with industry and the taming of nature, and as such, seems to be disliked by some types of fairies. On the other hand, in much of the Celtic folklore, baked goods are a traditional offering to the folk, as are cream and butter.</p> |  | <p>(especially church bells), St. John's clovers, among others. Some such as Rowan trees in sacred to the fairies, being protection Newfoundland folklore, type of fairy protection from stale bread to hard fresh home-made bread. some sort of special power is associated with the home and the</p> |
|---|--|--|

Notice that the text wrapping has changed around the new shape.

- With the picture selected click **Picture Effects** in the Picture Styles group



- Move the mouse pointer slowly down the list to see the many additional effects that are available
- Choose one of the **Reflection** styles

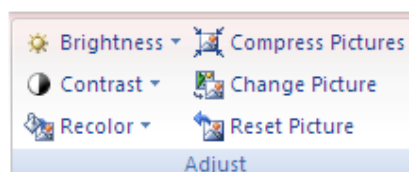
Notice that the text has reformed around the picture's reflection.

ADJUSTING THE PICTURE SETTINGS

Word includes an option that allows you to recolour the picture. This is particularly useful if you have a picture that is too dark or you want to 'age' a photograph.

With the picture selected:

- Look at the options in the **Adjust** group on the ribbon



- Click **Brightness**
- Move the mouse pointer slowly down the list to see the effect of the different brightness levels on the picture

- Click on **0% (Normal)** to ensure no changes have been made to the picture



Repeat the process with the **Contrast** option ensuring that your final choice is **0% (Normal)**.

Also try the **Recolor** option, this time selecting a different colour.

CLIP ART

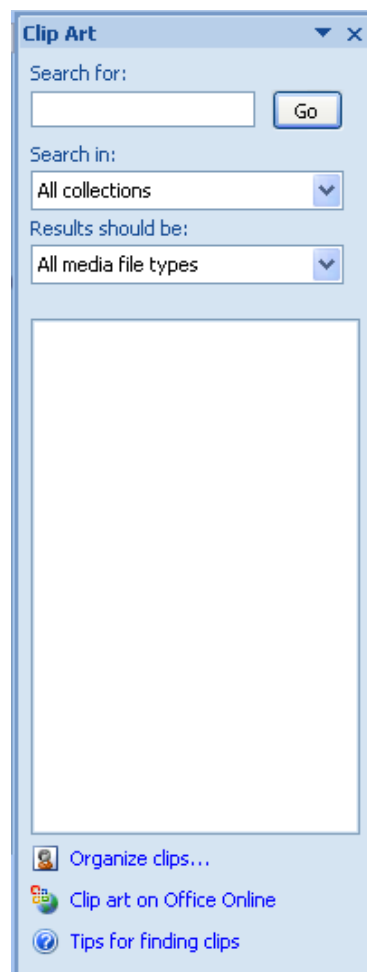
A clip is a single media file, including art, sound, animation, or movies. Obviously sound, animation and movies will not function if you are viewing them through Word, however, they do work if you preview the document as a Web page.

You can search for clips by keywords, or narrow your search by specifying the clip collection(s) you want to explore.

FINDING

- Move the insertion point to anywhere on page 2 of the document
- Select the **Insert** tab
- Click **Clip Art** in the **Illustrations** group

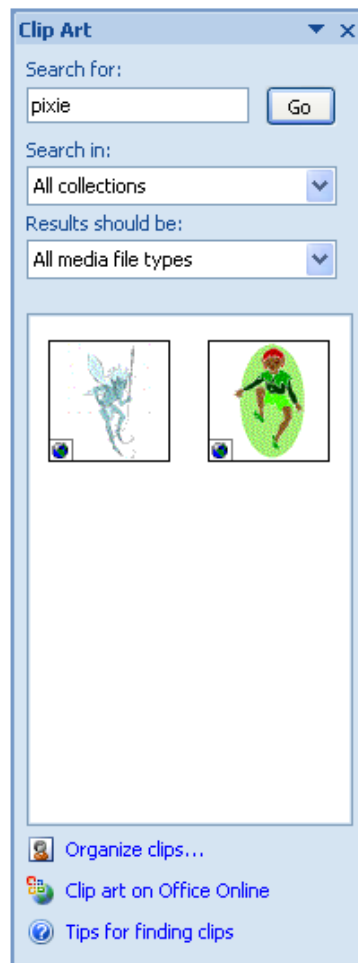
The Clip Art task pane is displayed.



In the Search for box at the top of the task pane:

- Type **pixie**
- Click the **Go** button

The results of the search are displayed as a series of 'thumbnails' - miniature versions of the pictures. You can see there are only two pictures that match your search criteria.

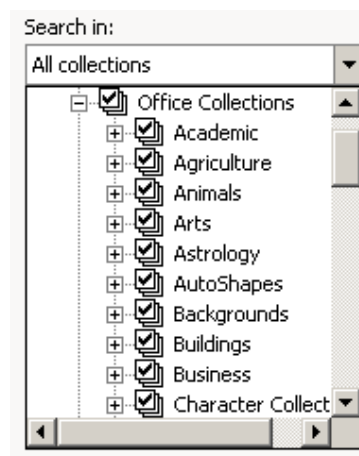


You can narrow the search using the other search options which allow you to search a particular collection, and/or specify the type of media you are looking for. Although you are not going to use these options in this exercise, it is a good idea to have a quick look at them for future reference.

- Click the **Search in** box



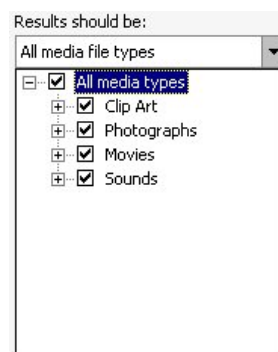
- Open the **Office Collections** folder



You can see that there is a very comprehensive list of collections available.

- Close the **Office Collections** folder
- Click the **Search in** box again to close it
- Click the **Results should be** box

You can select the type of media that you want to search for.



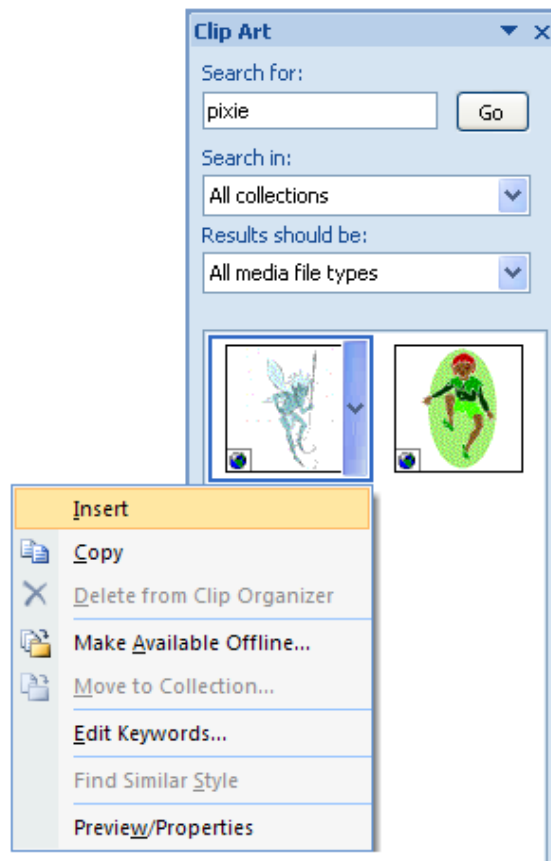
- Click the Results should be box again to close it

PREVIEWING AND INSERTING

- Point to one of the Clip Art pictures

Notice that when you point to a thumbnail image, an arrow appears to the right of the picture.

- Select one of the thumbnails, point at the arrow and click



The shortcut menu is revealed.

- Select **Insert**

The image is inserted in the file.

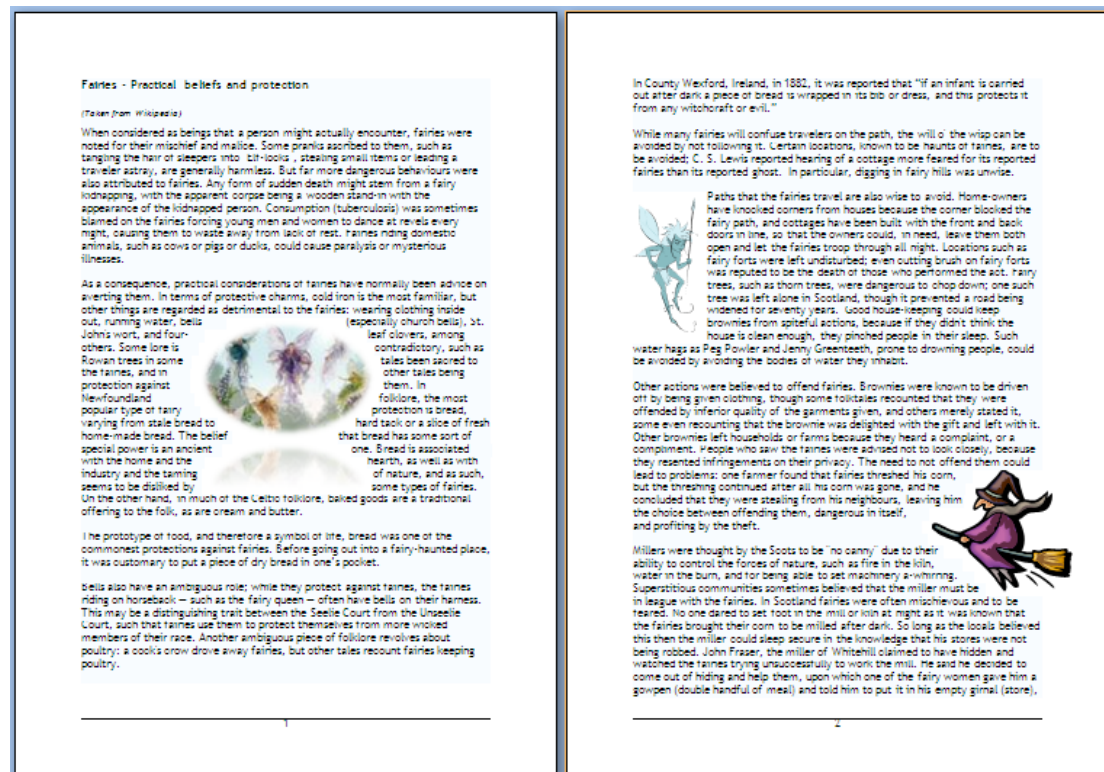
- Choose a Text Wrapping format and apply it to the image (this is the same as applying wrapping to a picture)

Click on the centre of the Clip Art object to insert it into your document.



- Position the insertion point in the paragraph at the end of page 2
- Search for a picture of a **witch**, select one and insert it
- Add Text Wrapping
- Resize it
- Use the options on the Picture Tools Format tab to change the look of your picture
- Save the document
- Check the document using Print Preview

Your document should look something like the one shown below.



- Close the document

TEXT BOXES

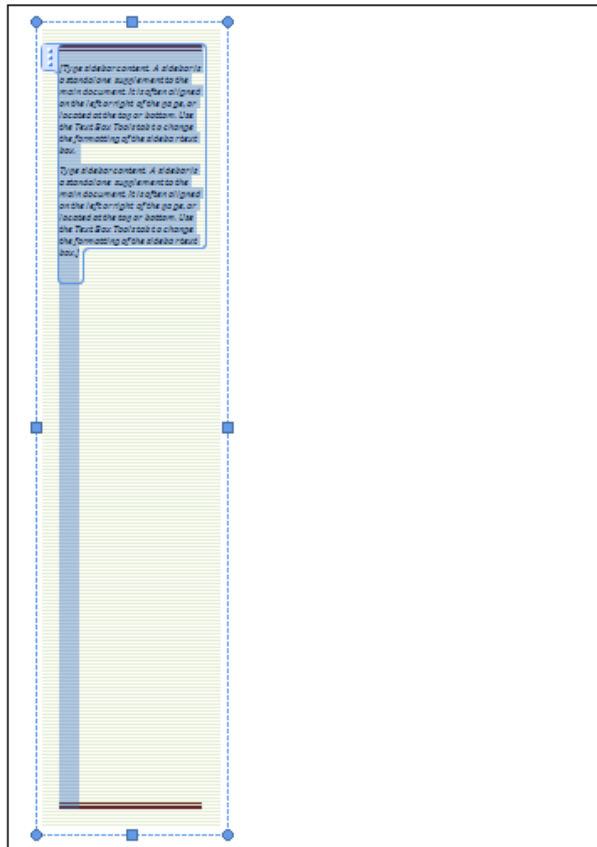
A text box is a moveable, resizable container for text or graphics. You can position it anywhere on the page. Most shapes can also include text. When you need a text box you can select one from a gallery of built-in text boxes or shapes.

BUILT-IN TEXT BOXES

- Open a new document
- Click the **Insert** tab
- Click **Text Box** in the Text group



- Scroll down the gallery to see what is available
- Choose **Alphabet Sidebar**



The text box is inserted into the page. This type of text box has several uses such as including the name and address of a company.

➤ Select the text box

➤ Type:

De Montfort University
The Gateway
Leicester
LE1 9BH

When you begin to type the sample text is deleted.



When you press the Enter key at the end of each line extra space is automatically included. If you prefer single line spacing, press **Shift+Enter** instead of the Enter key on its own.

➤ Close the document without saving


- Open the document called **BelieveInFairies**
- Position the insertion point towards the bottom of page 2
- Insert the text box called **Braces Quote 2**
- Reposition the text box if necessary
- Select the box and type: **Millers were thought by the Scots to be "no canny" due to their ability to control the forces of nature.**

compliment. People who saw the fairies were advised not to look closely, because they resented infringements on their privacy. The need to not offend them could lead to problems: one farmer found that fairies threshed his corn, but the threshing continued after all his corn was gone, and he concluded that they were stealing from his neighbours, leaving him the choice between offending them, dangerous in itself, and profiting by the theft.

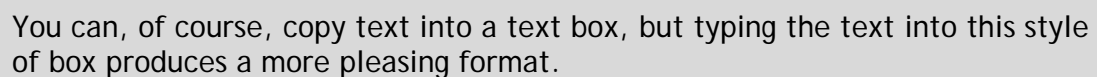
Millers were thought by the Scots to be “no canny” due to their ability to control the forces of nature, such as fire in the kiln, water in the burn, and for being able to set machinery a-whirring.

Millers were thought by the Scots to be “no canny” due to their ability to control the forces of nature.

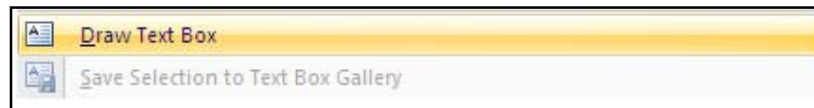
Superstitious communities sometimes believed that the miller must be in league with the fairies. In Scotland fairies were often mischievous and to be feared. No one dared to set foot in the mill or kiln at night as it was known that the fairies brought their corn to be milled after dark. So long as the locals believed this then the miller could sleep secure in the knowledge that his stores were not being



2



- Select the paragraph on the first page beginning **The prototype of food.....**
- Insert a text box using the **Draw Text Box** option at the bottom of the Text box gallery

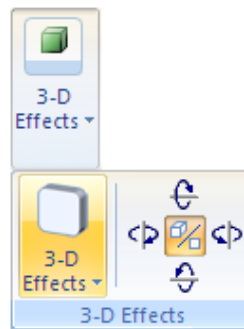


A text box is created to hold the selected text.

- Make the text box square and position it at the bottom of the page

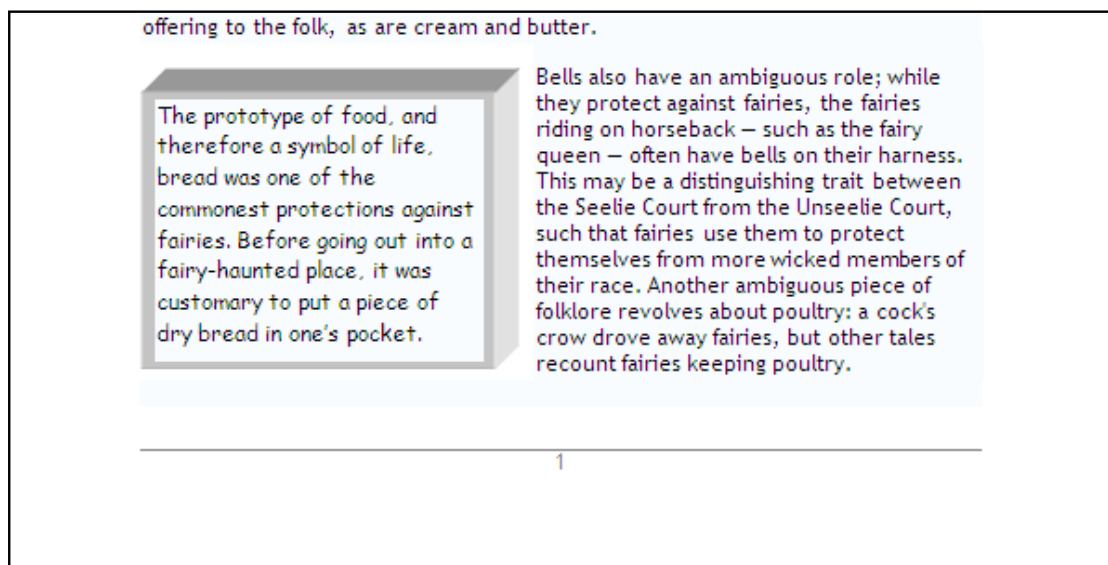
With the text box selected:

- Click the **Format** contextual tab on the **Text Box Tools**
- Choose a **3-D Effect** to apply to the text box



- Select the text in the box and choose a different font such as Comic Sans

Your document should look something like this.

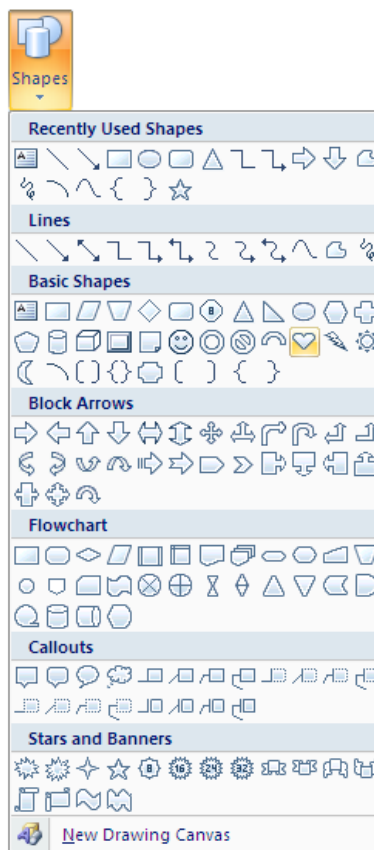


SHAPES

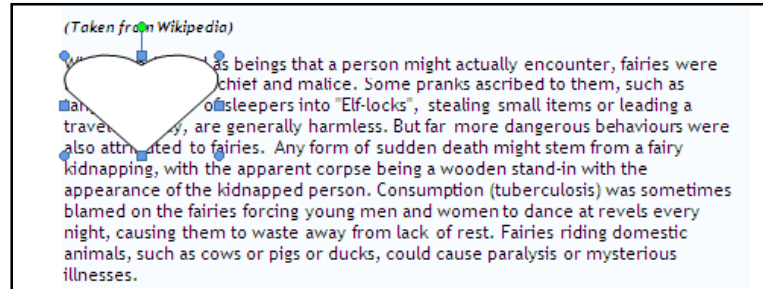
If you would like to use a Shape as a text box you have a wide choice.

The BelieveInFairies document should still be open.

- Position the insertion point at the beginning of the first paragraph on page 1
- Click the **Insert** tab
- Click **Shapes** in the **Illustrations** group
- Select the **Heart** shape in the **Basic Shapes** section

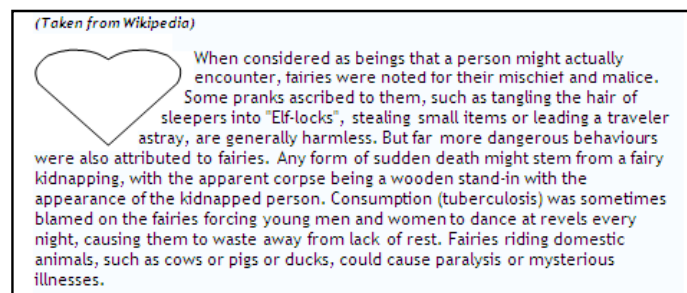


- Click and drag the cross hair insertion point to indicate the size of the shape



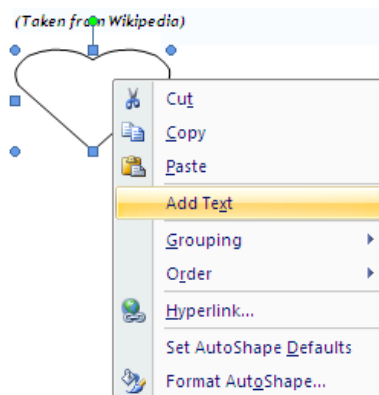
The shape appears in front of the text.

- Apply the **Tight Text Wrapping** format to the shape



To add text:

- Select the shape and click the **right mouse button**
- Choose **Add Text**

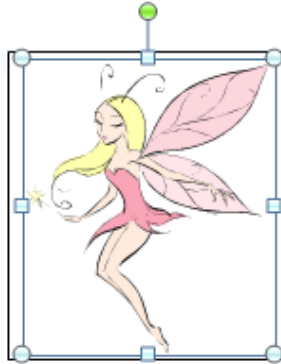


- Type **Fairies were noted for their mischief**
- Change the font size to **10**

ADDING PICTURES TO A TEXT BOX

Most of the formatting features that are available with Text boxes are not available if you choose to insert a picture directly into a document. However, you can insert a picture into a text box and then use the formatting effects to make it appear that they have been applied to the picture.

- Position the insertion point at the end of the document
- Insert a text box
- With the insertion point inside the text box insert a **Clip Art** image of a **fairy**



As the picture is inside the text box, when you move the text box the image moves too.

When you insert a graphic into a text box the size of the graphic is modified to fit the box. So if you have a very small text box, you get a very small picture. Although the size of the picture changes, it retains the width/height proportion.

If you change the size of the text box once the picture has been inserted, the picture is not resized.



Take care when you have a picture within a text box as you need to make sure you select the correct object (text box or picture) when you want to format it.

Also, if you want to move the text box, make sure you have it selected before dragging it to a new position. If you select the picture instead you can drag it out of the text box altogether.

- Hide the lines around the picture
- Add a 3-D format to the text box



IMPORTANT TO REMEMBER

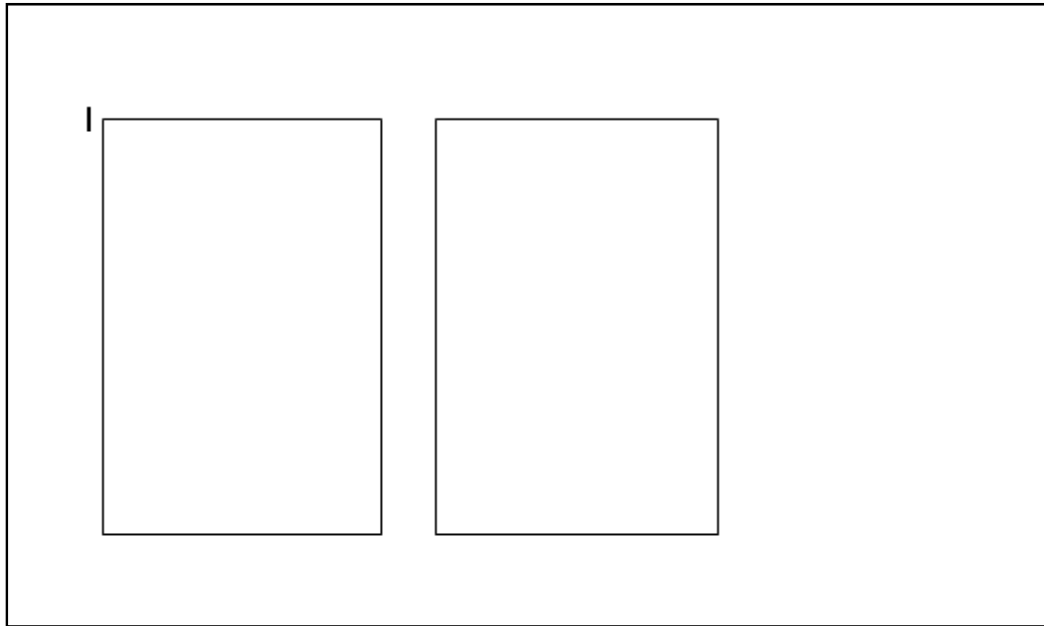
1. Remember that if you rotate the picture within the text box, the text box will not turn with it as it is a separate object.
 2. If you add a text box to selected text, the text is moved from the document and placed in the text box. So, if you delete the text box, you delete the text too.
-

LINKING TEXT BOXES

Linking or chaining text boxes is a feature more common when using publishing software to create a document such as a newsletter.

In Word you can create two or more text boxes and link them together so that text 'flows' from one to another. The text boxes may be of any size and may be positioned on the page where required, or on another page if necessary.

- Go to the bottom of the document
- Insert a page break
- Draw two text boxes on the page side by side - you can copy the them if you need them to be the same size



- Position the insertion point at the top of the document

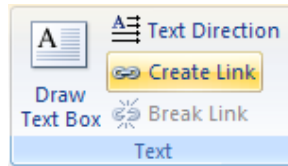
Instead of typing text into the boxes you will copy the first paragraph at the beginning of the document. However, you can't copy a shape (the heart) into a text box so:

- Delete the shape from the first paragraph
- Select the first paragraph and copy it
- Position the insertion point in the left text box at the bottom of the document
- Click **Paste**

The text box is too small to display all of the copied text.

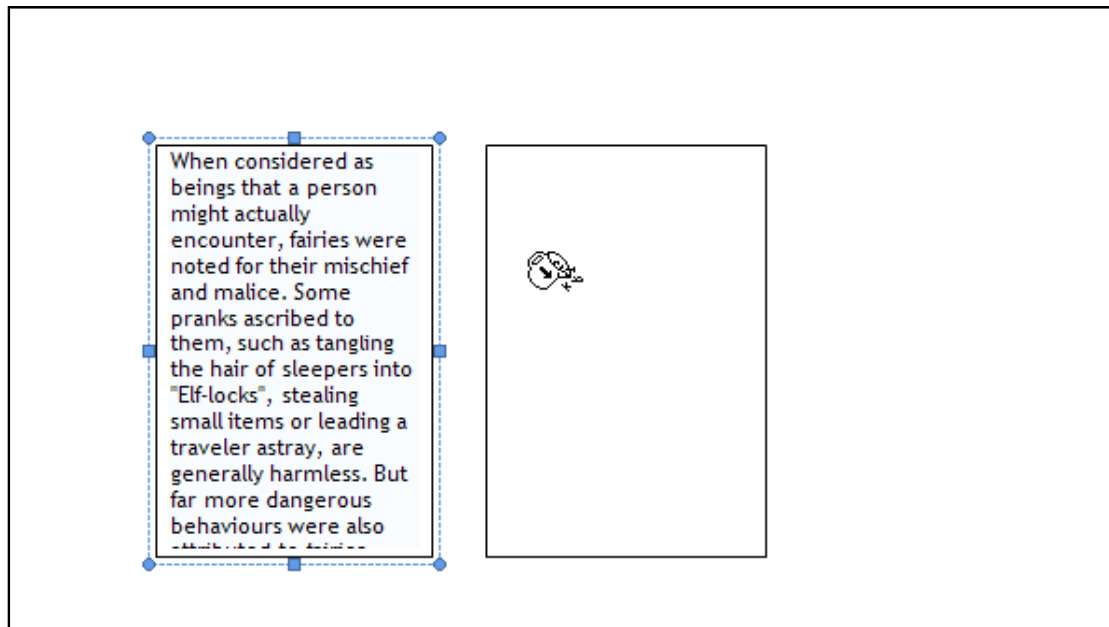
With the left hand text box selected:

- Click the **Format** contextual tab
- Click the **Create Link** button in the **Text** group



- Move the insertion point to the second text box

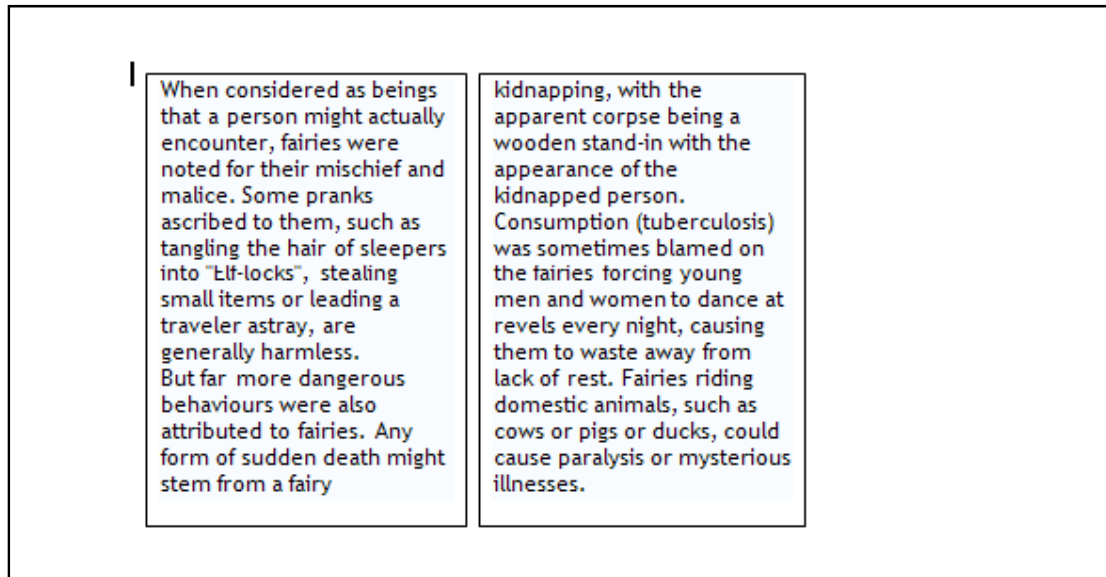
The pointer changes to a pitcher pouring letters out.



- Click the left mouse button

The link is made and the text is pasted in.

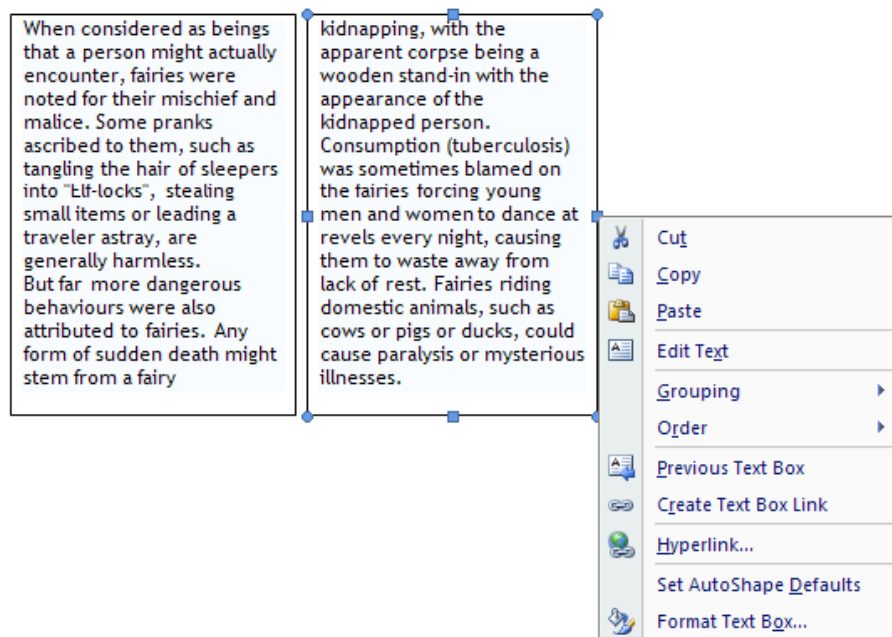
- Adjust the size of the text boxes so that the text is balanced between the two



When you look at a linked text box there is no indication that it is linked.

To check if there is a link:

- Point to the border of the right text box
- Click the right mouse button



If the box is linked there will be an option to go to either the Previous Text Box or the Next Text Box.

- Save and close the document

GROUPING SHAPES

When you use several text boxes and shapes together you can group them so they become one large object instead of a collection of small ones.



- Open a new document
- Using a variety of shapes, draw a snowman similar to the one shown below

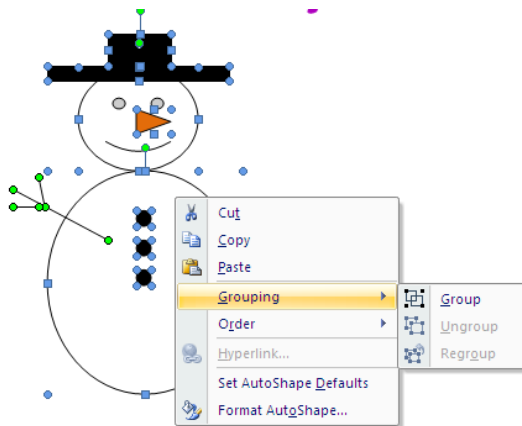


To group the shapes:

- Select the body
- Hold the Ctrl key down and click on each of the other shapes one after the other

When all shapes have been selected:

- Point to the centre of the shapes
- Click the **right** mouse button
- Select **Grouping**
- Group



All the shapes are grouped and will move as one if the object is moved.

To ungroup the shapes:

- Point to the object
- Click the **right** mouse button
- Select **Grouping**
- Ungroup

USING A TEXT BOX AS A LABEL

You can also use text in a text box to label a picture.



- Add a text box containing the word 'snowman'
- From the shapes add an arrow
- If necessary, use the Format contextual tab to modify the arrow



1. Once the objects are grouped you may find that the text wrapping format is lost. In this case you will need to add blank lines to the text to make a space for the grouped objects.
2. Should you need to modify a grouped object you will need to ungroup it first.
3. To nudge an image or group of objects into place, select the object and use the arrow keys to gently move it into position.

➤ Close the document without saving

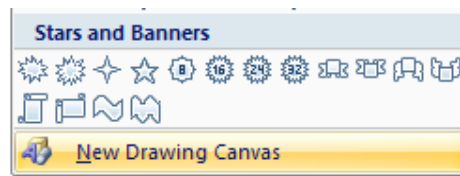
THE DRAWING CANVAS

Grouping drawing objects is a useful way of keeping them together so that, if one moves, they all move. However, if you want to group a graphic and a text box this feature is not available in Word 2007 (you might have noticed on the previous exercise). In this situation you can use the Drawing Canvas.

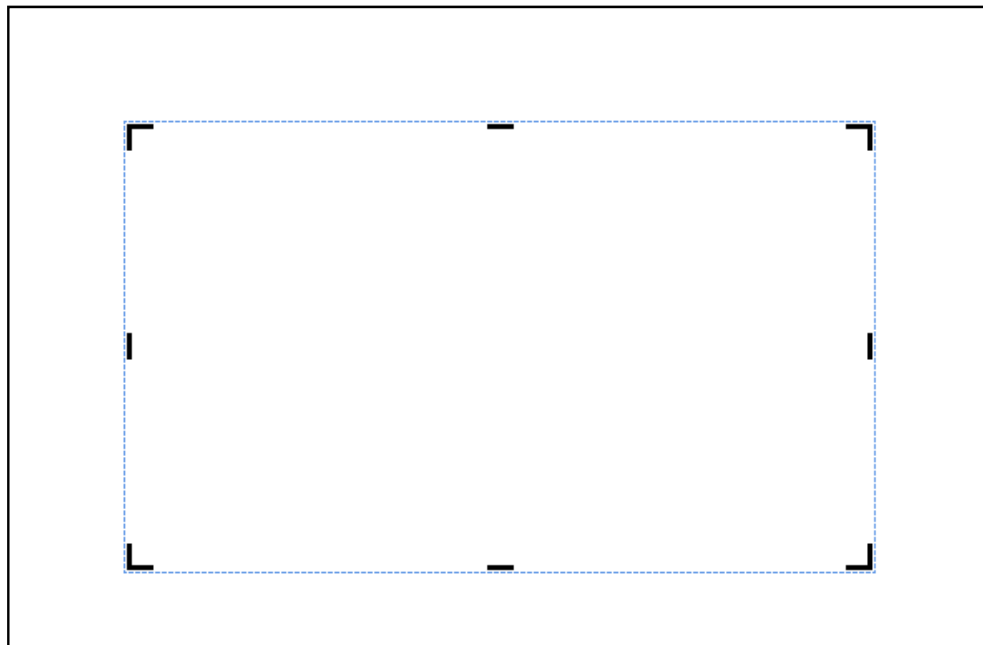
With a drawing canvas you may group any number of drawing objects and graphics.

A drawing canvas is not automatically inserted into a document when you choose to insert a shape. But, if you prefer to use it to group objects, it can be set to appear by default - see page 36.

- Open a new document
- On the **Insert** tab click **Shapes** in the **Illustrations** group
- Choose **New Drawing Canvas** at the bottom of the **Shapes** gallery



A drawing canvas is inserted into the document.



- Insert a **Clip Art** image of a wizard
- Add a text box label and an arrow
- Include several stars
- Resize the drawing canvas to fit the objects



- Format the drawing canvas with a text wrapping style
- Point to the edge of the canvas and drag it to a new position on the page

All of the objects within it are moved together.

- Click away from the drawing canvas - the outline is hidden

DRAWING CANVAS BY DEFAULT

If you would like a drawing canvas to be inserted into a document automatically when you choose to insert a shape:

- Click the **Office Button**
- Click **Word Options**
- Choose **Advanced** from the list on the left

In the **Editing options** section:

- Select **Automatically create drawing canvas when inserting AutoShapes**
- Click **OK**
- Close the document without saving

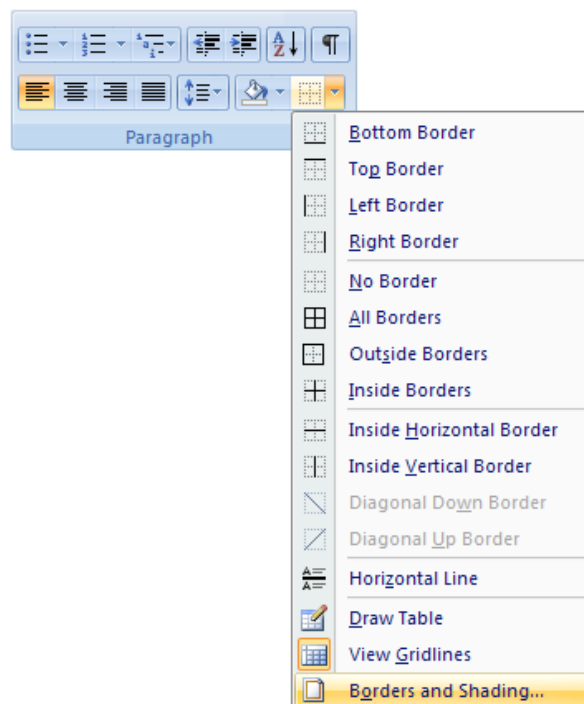
BORDERS AND SHADING

You can add a border to a page or to text. This is useful if you want to draw a line underneath a paragraph or enclose a paragraph or title within a border.

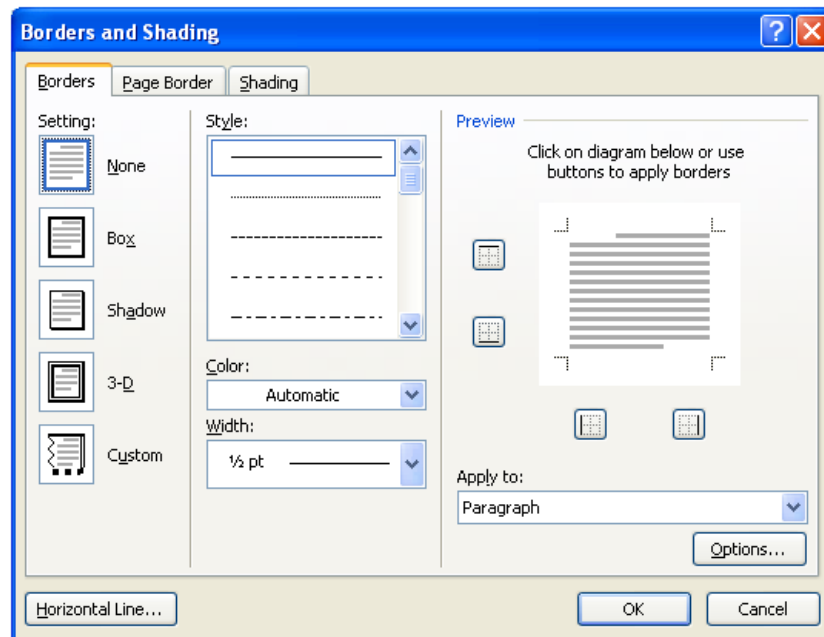
You can also use shading to highlight text or fill in the background of a table.

TEXT BORDER

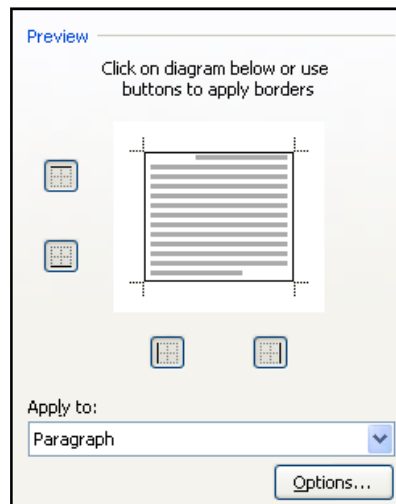
- Open the document called **BelieveInFairies**
- Select the document heading
- Click the arrow at the side of the **Borders** button in the **Paragraph** group of the **Home** tab
- Select **Borders and Shading**



The Borders and Shading dialog box is displayed

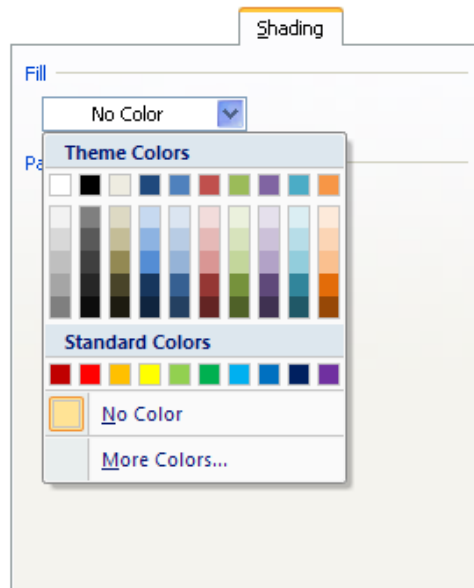


- Ensure the **Borders** tab is selected
- In the **Setting** section click **Box**
- Ensure **Paragraph** is selected in the **Apply to:** section

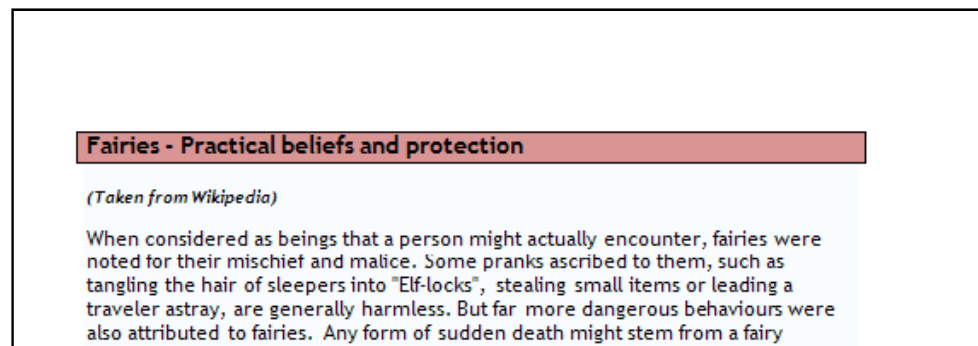


- Click the **Shading** tab

- In the Fill section choose a vibrant colour for the background of the border



- Click OK



- Add a shaded box border to the paragraph beginning 'While many fairies.....' on page 2
- Save the document

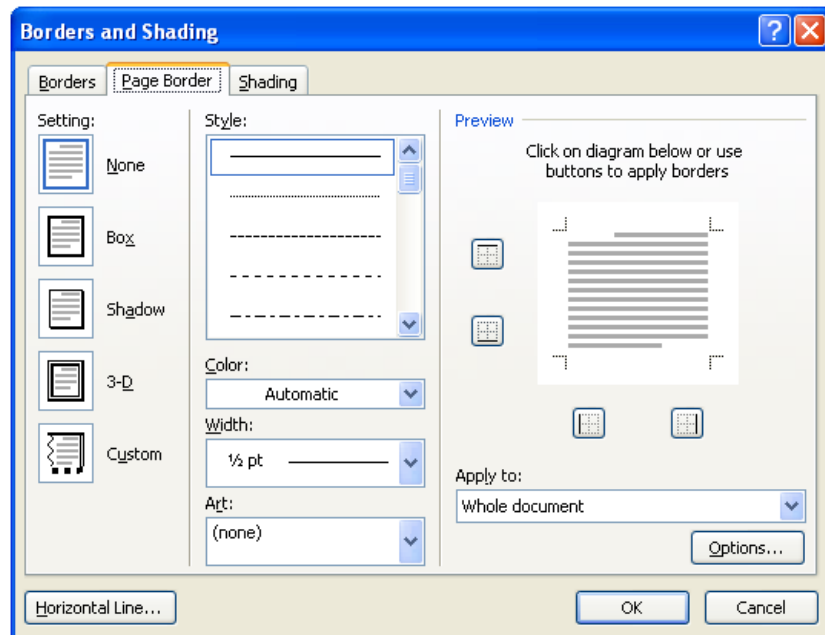
PAGE BORDER

You are going to apply a border around the page.

- The file called **BelieveInFairies** should still be open
- Click the **Borders** button in the **Paragraph** group of the **Home** tab
- Choose **Borders and Shading**

The **Borders and Shading** dialog box is displayed.

- Click the **Page Border** tab



- In the **Setting** section, click **Box**
- In the **Style** section, scroll down the list and choose a line style
- Click the down arrow next to **Color** and select a colour from the palette
- Click **OK**
- Look at the document in **Print Preview**
- Close **Print Preview**
- Click **Undo** to remove the page borders ready for the next exercise

Graphical page border


As well as various line styles, you can choose a graphical page border.

- Click the **Borders** button in the **Paragraph** group of the **Home** tab

The **Borders and Shading** dialog box is displayed.

- Click the **Page Border** tab
- In the **Setting** section, click **Box**
- Click the down arrow next to **Art** to see a selection of graphical styles



- Scroll down the list and choose the cat shape 
- Click the down arrow next to **Color** and select a **medium grey** from the palette
- Click **OK**
- Look at the document in Print Preview
- Close Print Preview
- Save and close the document



If you choose a heavy pattern, the page border may appear over the document text.

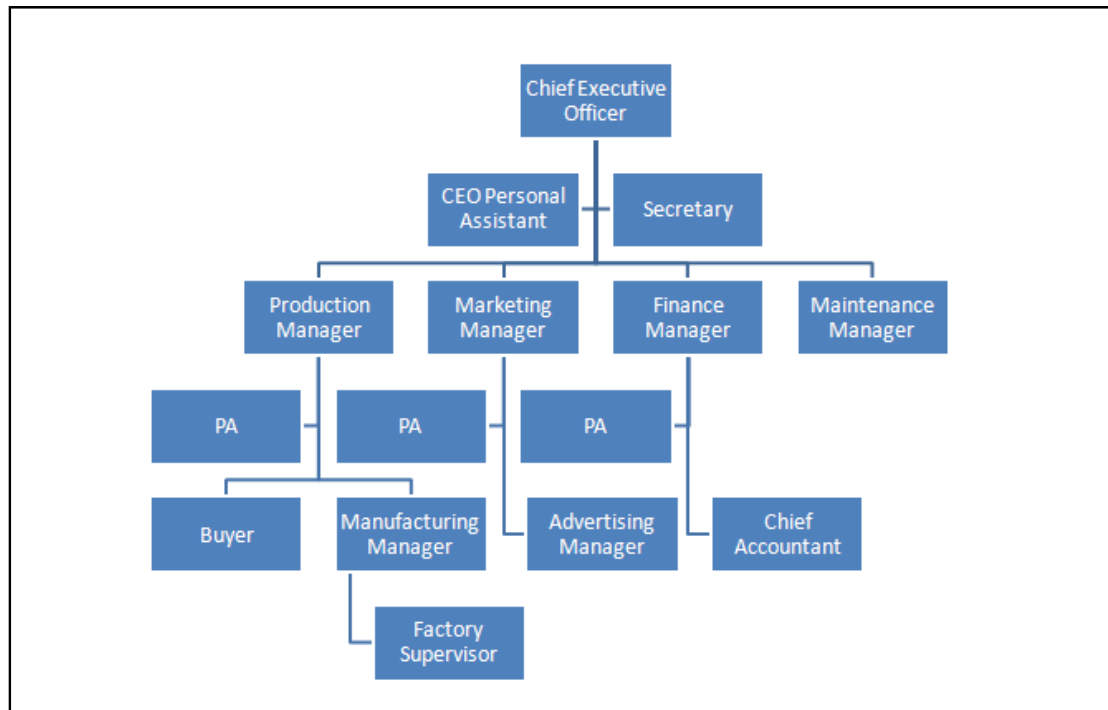
Always check this in Print Preview before printing.

SMARTART

When thinking about using a graphical object to represent information and ideas, SmartArt can generally be used to represent text and charts for numbers (taken from Microsoft Help).

CREATING AN ORGANISATION CHART

An organisation chart is one of many different types of SmartArt available within Word 2007. In this exercise you will create an organisation chart like the one shown below.

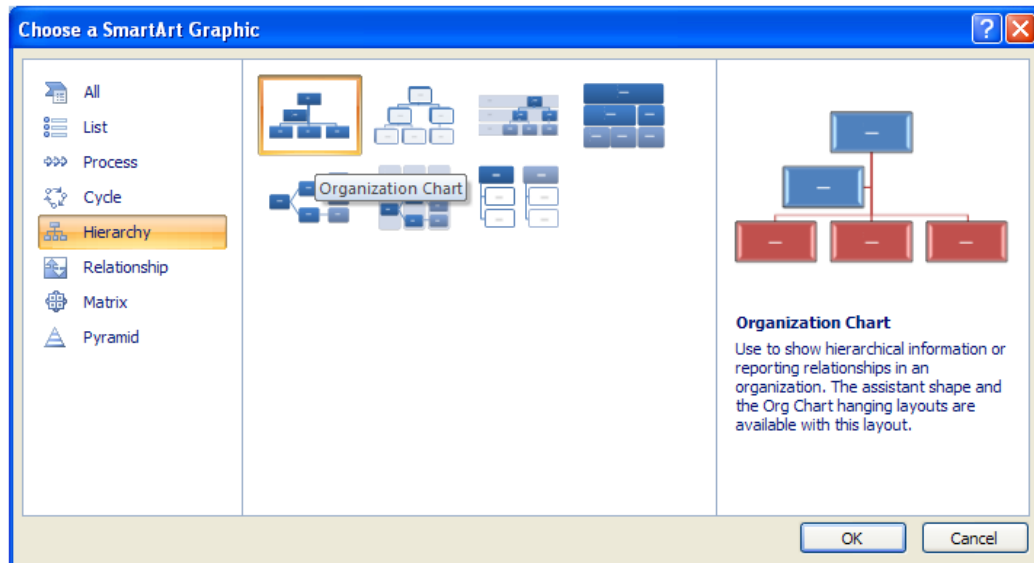


- Open a new document
- Change the orientation of the document to **Landscape**
- From the **Insert** tab choose **SmartArt** from the **Illustrations** group



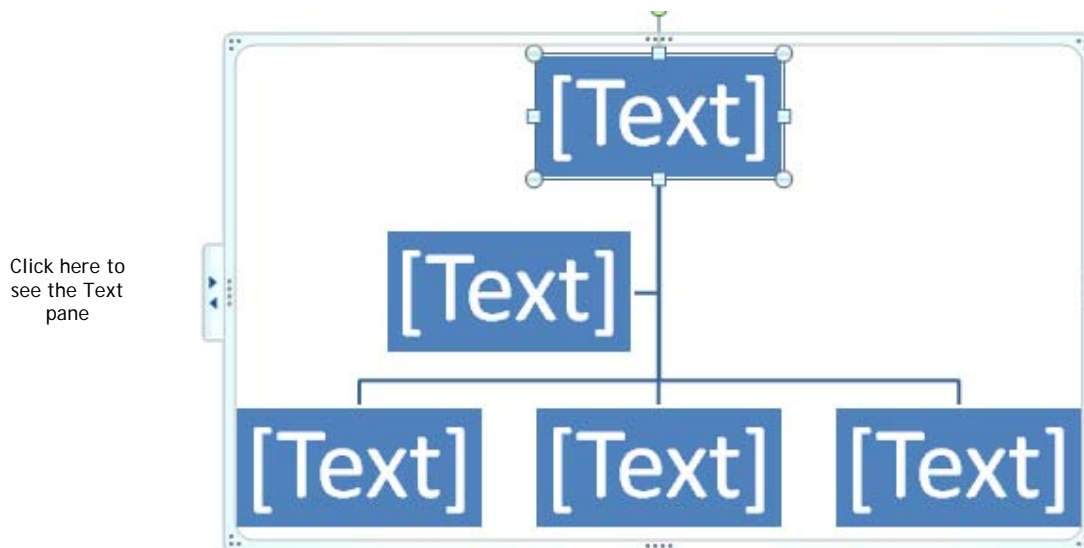
The Choose a SmartArt Graphic dialog box is displayed.

- Choose **Hierarchy** in the list on the left



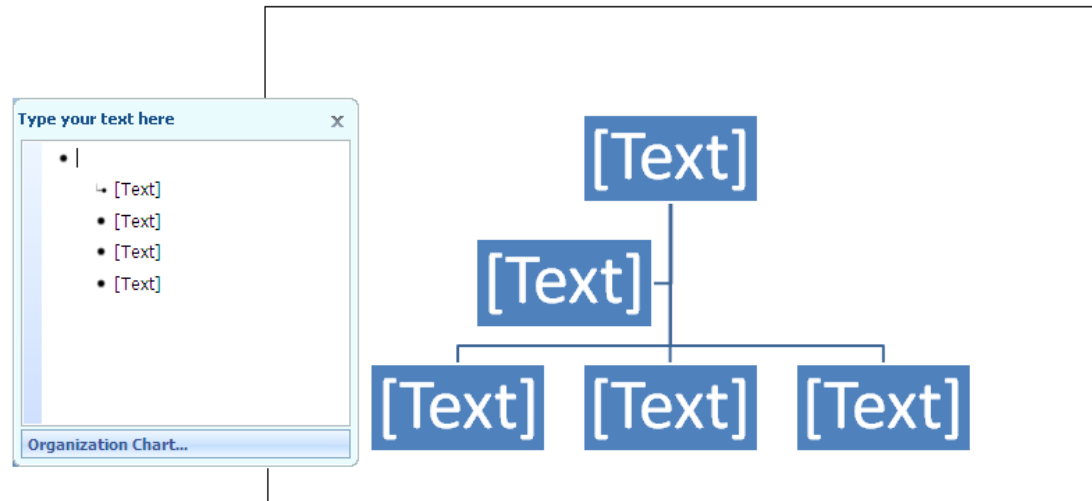
- From the middle section of the dialog box choose **Organisation Chart**
- Click **OK**

An organisation chart is inserted ready for you to edit.



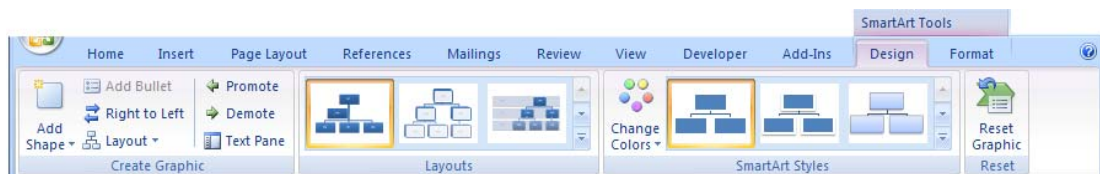
When creating SmartArt, you have the option of typing text directly into the chart or you can use a Text Pane to help you to enter and manage the boxes on the chart.

- Click the tab to the left of the chart to show the Text pane



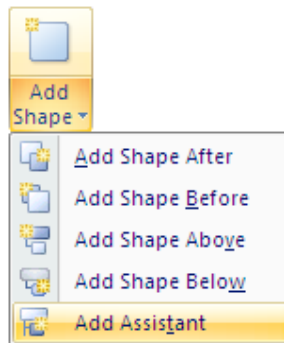
For this exercise you will type directly into the chart:

- Close the Text pane by clicking the X in the top right hand corner
- Click the **Design** contextual tab

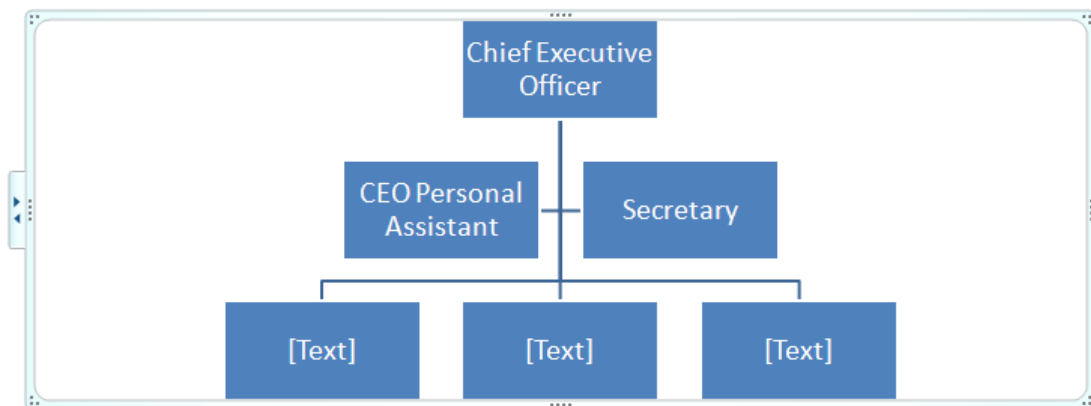


- Select the text box at the top of the graphic
- Type **Chief Executive Officer**
- Type **CEO Personal Assistant** in the box below the Chief Executive Officer
- Select the box labelled **Chief Executive Officer**

- Click the bottom of the **Add Shape** button in the **Create Graphic** group
- Choose **Add Assistant**



- Select the new box and type **Secretary**



Microsoft recommends that you create the chart before entering text into the boxes. To do that would need to draft the chart out on paper before you start to create it.

However, for this exercise it would be difficult to indicate to you where the boxes were to be created and which box to type into, because they all look the same.

- Select the box for **Chief Executive Officer**
- Click **Add Shape**
- Click **add Shape Below**

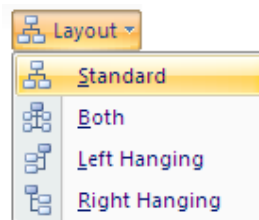
- Add text to match the picture below



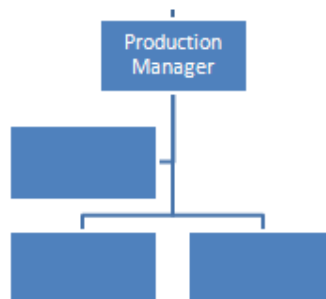
- Select the **Production Manager**
- Add Assistant

You are going to Add Shape Below the Production Manager. To ensure the shape has the correct layout:

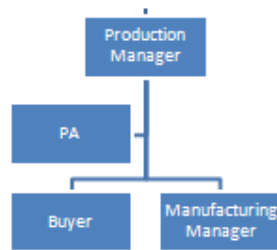
- Click **Layout** in the **Create Graphic** group
- Choose **Standard**



- Select the Production Manager
- Add Shape Below
- Add a second shape below the Production Manager



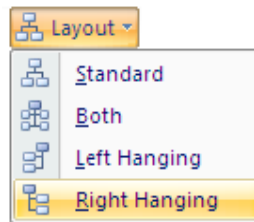
- Add text to the boxes to match that shown below



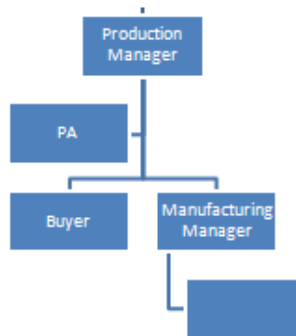
- Select the **Manufacturing Manager**

You want to change the layout for the next box so that it is Right Hanging.

- Click **Layout** in the Create Graphic group
- Right Hanging



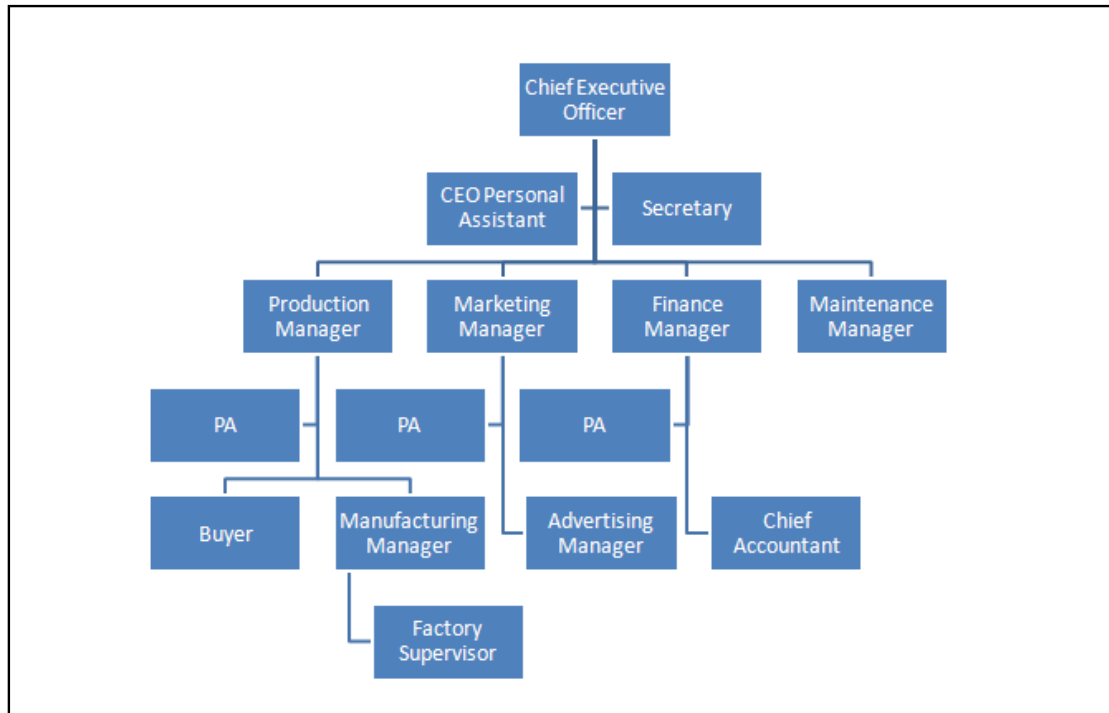
- Add Shape Below



- Select the new text box and type **Factory Supervisor**



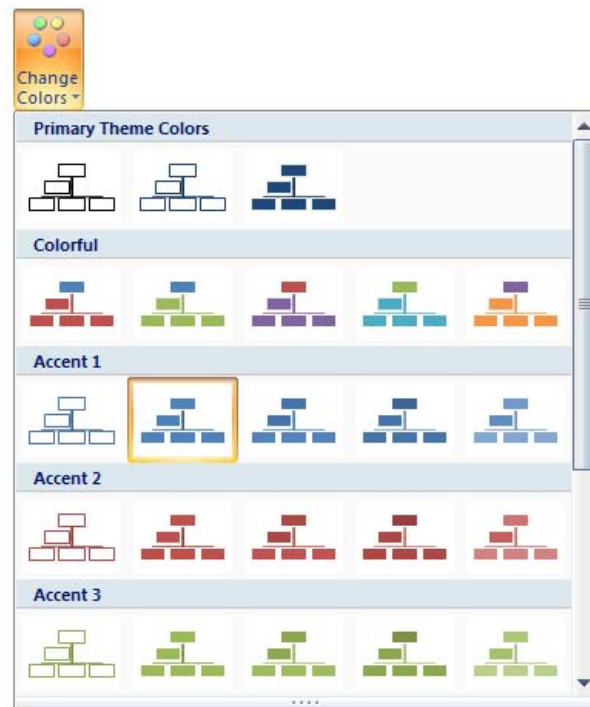
- On your own add relevant shapes to the graphic to produce a completed hierarchy chart like the one shown below



Now that you have your finished organisation chart you can try changing the colours and style

With the Design tab selected:

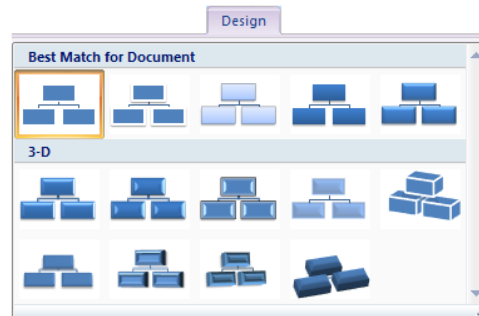
- Click **Change Colors** in the **SmartArt Styles** group



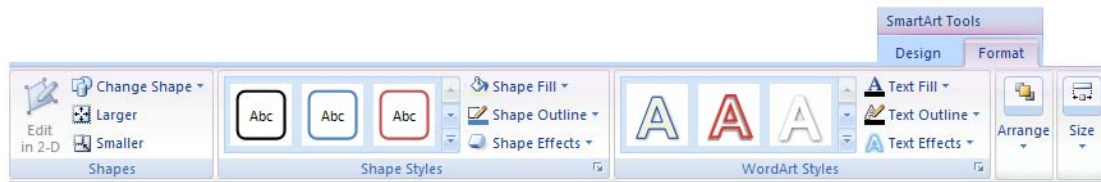
- Choose a new colour for the chart

Still in the **SmartArt Styles** group:

- Choose a different style for the chart

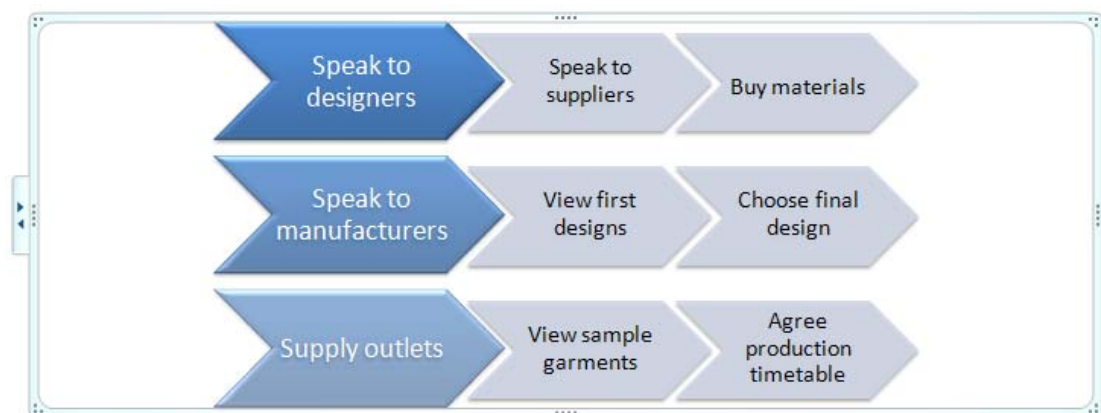


- Click the **Format** contextual tab



Try using some of the options:

- Change the shape of some of the boxes
- Fill the boxes with a different colour using **Shape Fill**
- Add a glow using **Shape Effects**
- Select the box for the **Chief Executive Officer** and make it bigger by clicking the **Larger** button in the **Shapes** group
- Save the document in the **Word2007Graphics** folder using the name **Organisation Chart**
- Close the document
- Open a new document
- Use SmartArt to create the following graphic (it is in the **Process** group)



- Use the **Format** options to change colours and shapes
- Choose a different **Layout** (on the **Design** tab) for the graphic
- Save the document with the name **MyChart**
- Close the document

CHARTS

In the previous section it was said that while SmartArt is the best way to represent information and ideas, the best way to portray numerical information is to use a chart.

LINKING OR EMBEDDING AN OBJECT WITHIN WORD

By linking information across Office applications, you can create sophisticated documents that include, for example, data from Access, worksheets and charts from Excel, and slide presentations from PowerPoint.

The term 'object' is used to define the information that is exchanged between applications.

You can have two sorts of object: linked or embedded.

A 'linked object' is an object that is created in one application and inserted in another while maintaining a connection between the two files.

For example, say you copy an Excel worksheet or chart into a Word file as a linked object. Any subsequent changes that you make to the worksheet while working with it in Excel are automatically reflected in the copy of the worksheet which you have placed in the Word document.

An 'embedded object', on the other hand does not change if you modify the source file. It is a snapshot of data at a specific time and is not updated if any changes are subsequently made to the worksheet in Excel.

There are three ways to include a chart in a document:

- Insert a chart directly into the page
- Copy a chart from an Excel worksheet - **embedding** the chart
- Copy a chart from an Excel worksheet and **link** it so that it can either automatically update if the source data is modified, or you can choose to update the link manually.

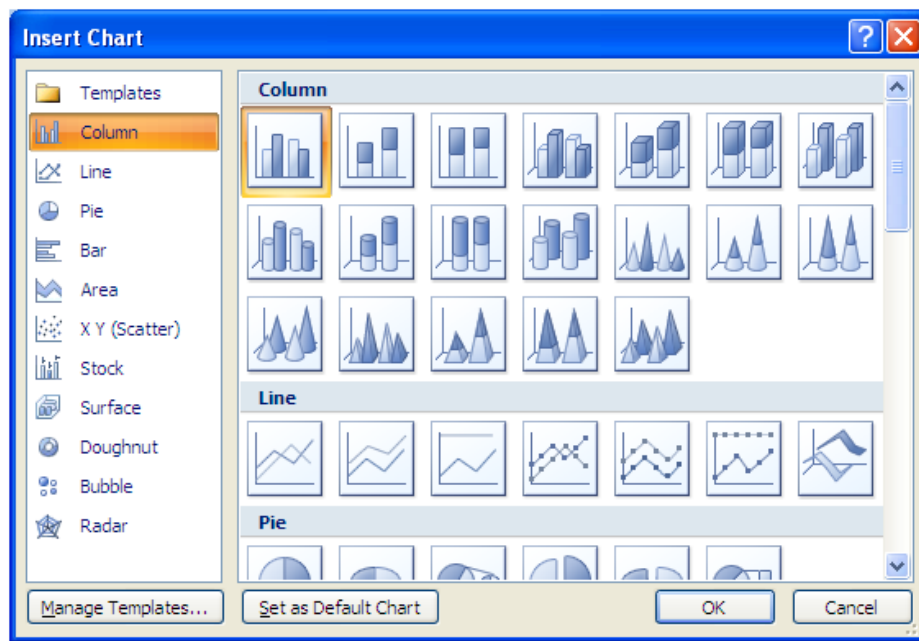
INSERTING DIRECTLY INTO A WORD DOCUMENT

If you need to insert a chart into a document but do not have the data already saved in an Excel workbook, you can create a worksheet directly in the document.

- Open a new document
- Choose the **Insert** tab
- Click the **Chart** button in the **Illustrations** group

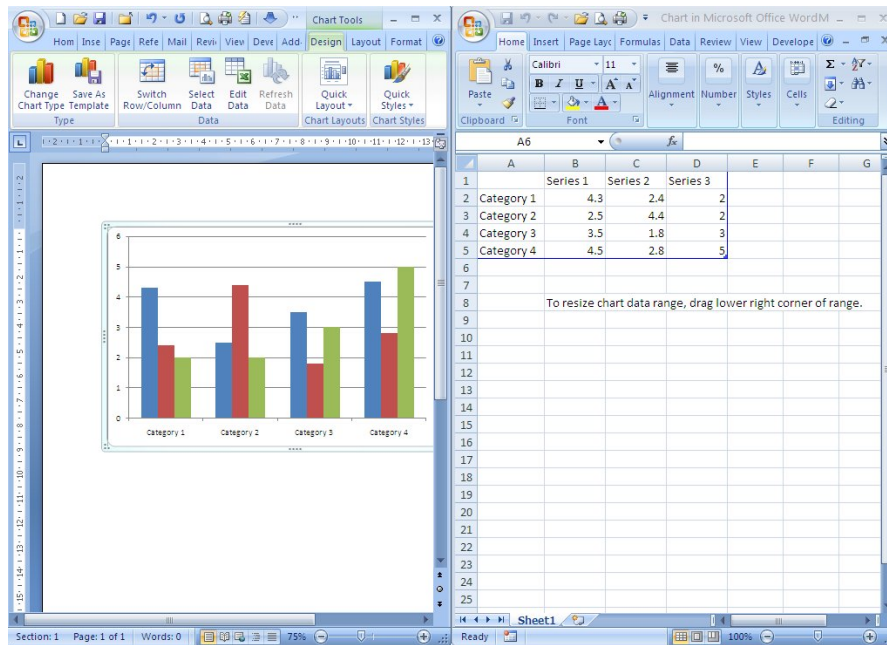


The Insert Chart dialog box is displayed offering a selection of chart styles to choose from.



- Choose the **Clustered Column** chart in the Column group
- Click **OK**

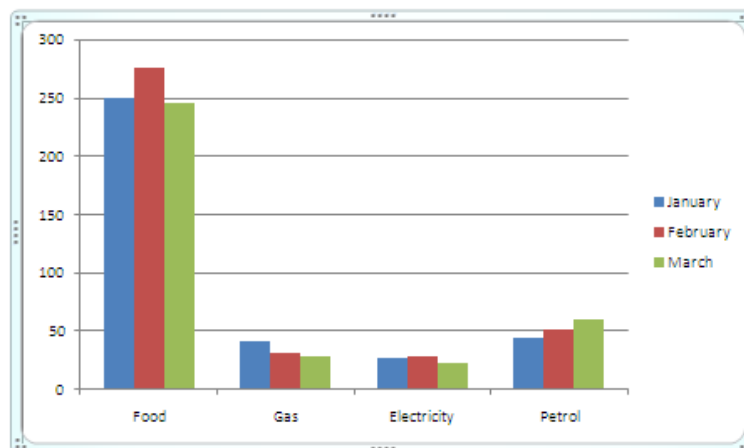
A chart is inserted into the document and Excel is opened to allow you to edit the sample data to reflect your own requirements.



Edit the existing data to read as follow:

| | A | B | C | D | E |
|---|-------------|---------|----------|-------|---|
| 1 | | January | February | March | |
| 2 | Food | 250 | 275 | 245 | |
| 3 | Gas | 42 | 32 | 29 | |
| 4 | Electricity | 27 | 28 | 23 | |
| 5 | Petrol | 44 | 51 | 60 | |
| 6 | | | | | |

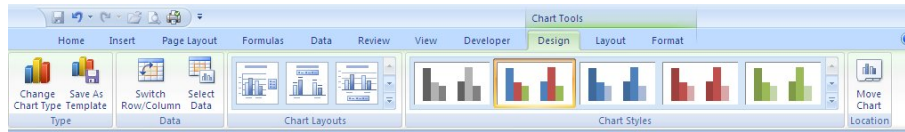
As you enter the data the chart is automatically updated to reflect the changes.



- Close the Excel worksheet

To edit the chart:

- Select the chart
- Click the **Design** contextual tab



- Choose **Edit Data** in the **Data** group

Excel is opened again and you can edit the data if required.

- Change the **food** for **February** to £235.00

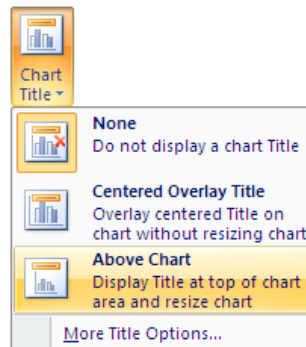
The chart is updated.

- Close Excel

Add a title to the chart

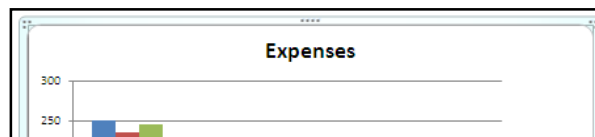
With the chart selected:

- Choose the **Layout** contextual tab
- Click **Chart Title** in the **Labels** group
- Choose **Above Chart**



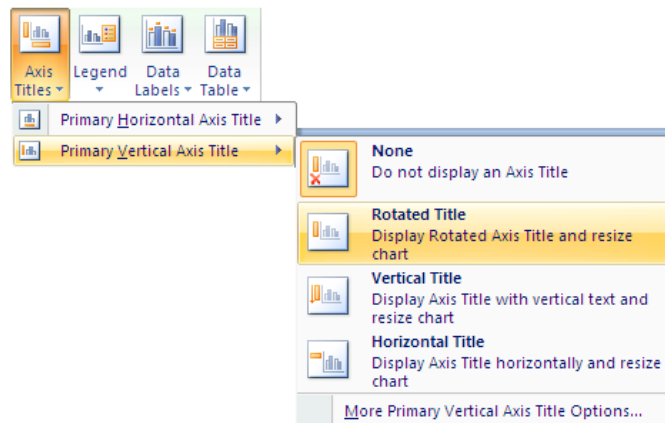
A text place holder is inserted into the chart area.

- Type **Expenses**



To add a title to the vertical axis:

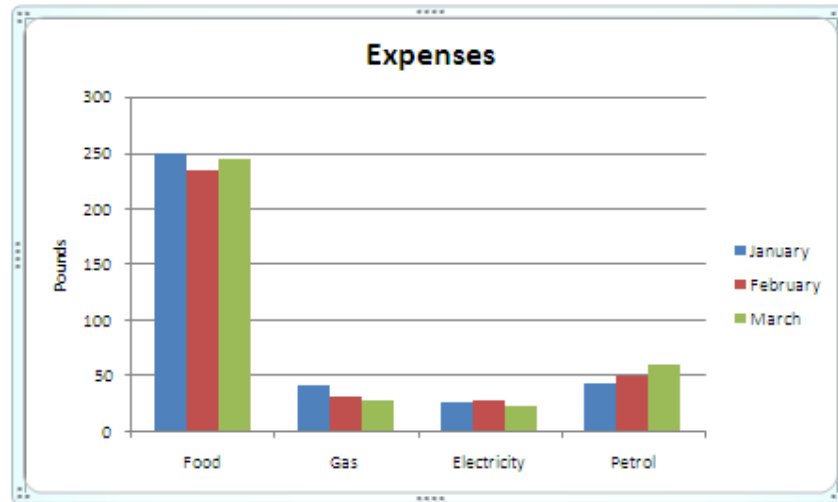
- Click **Axis Titles** in the **Labels** group
- Point to the **Primary Vertical Axis Title**
- Choose **Rotated Title**



A text place holder is added to the left of the chart

- Type **Pounds**

The chart should now look similar to this.



- Experiment with the **Chart Styles** (Design contextual tab)
- Change the Chart Type (Design tab) to **3D Cone**
- Change the Chart Type to **Line**
- Close the document without saving

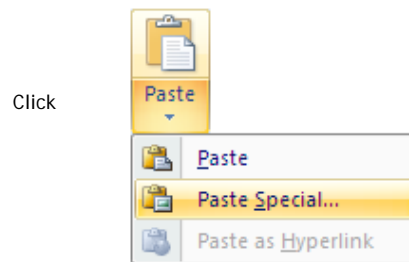
EMBEDDING USING PASTE SPECIAL

You can copy a chart from an Excel workbook into a Word document. Although you can edit the chart, it is no longer part of the source file (the Excel workbook). So, if the source data is edited in Excel, the chart in the document is not updated.

- Open a new blank document
- Open Excel
- In the Word2007Graphics folder, locate and open the workbook **ITBookings**
- Select the chart
- Click the **Copy** button on the **Home** tab

In the Word document:

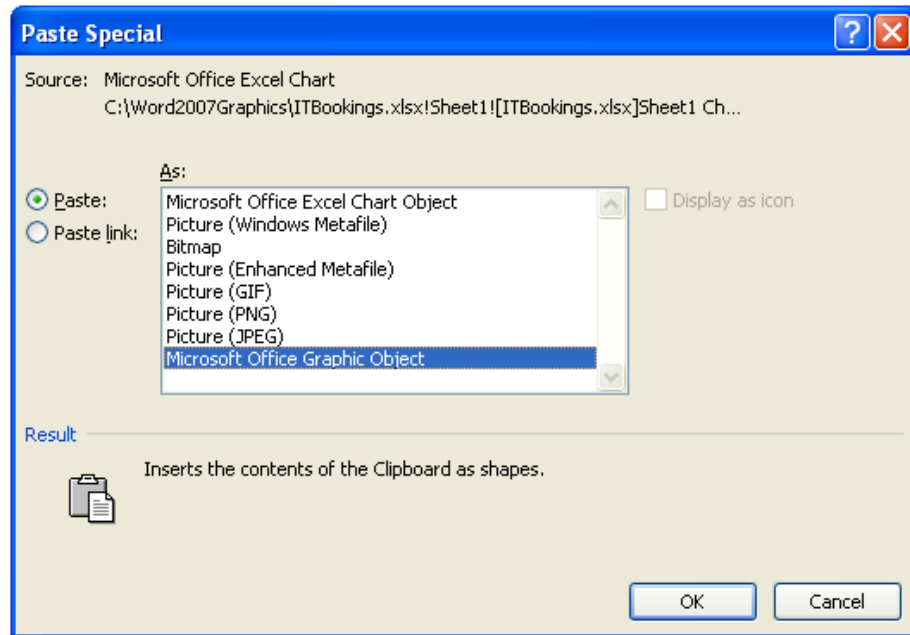
- Position the insertion point where you want to place the linked chart
- Click the bottom of the **Paste** button on the **Home** tab



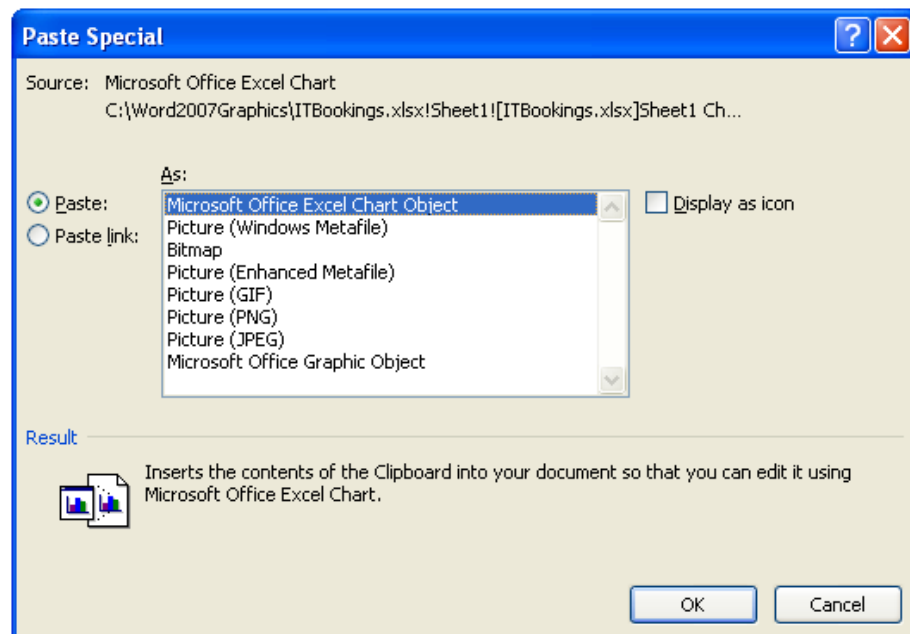
- Click **Paste Special**

The Paste Special dialog box is displayed.

Notice that the range details are included in the source information

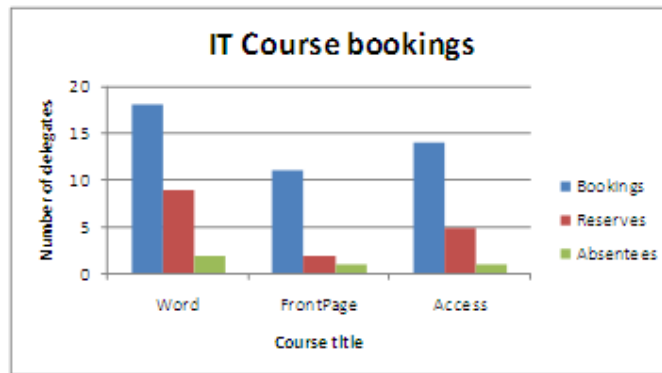


- Ensure **Paste** is selected
- Select **Microsoft Office Excel Chart Object**



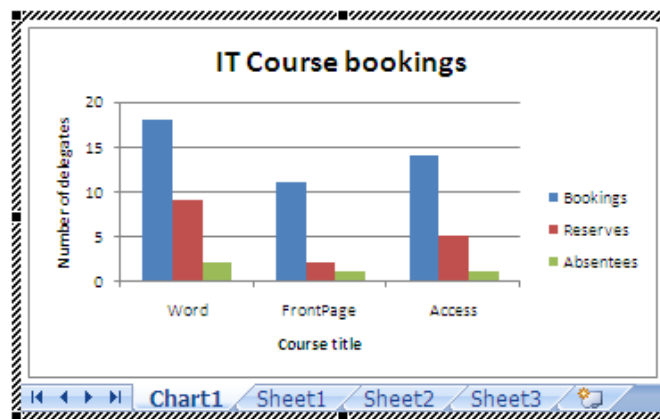
- Click **OK**

The chart is pasted into the document.



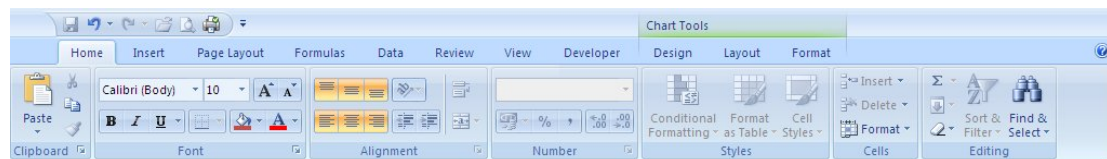
To edit the chart:

- Double click the chart to select it

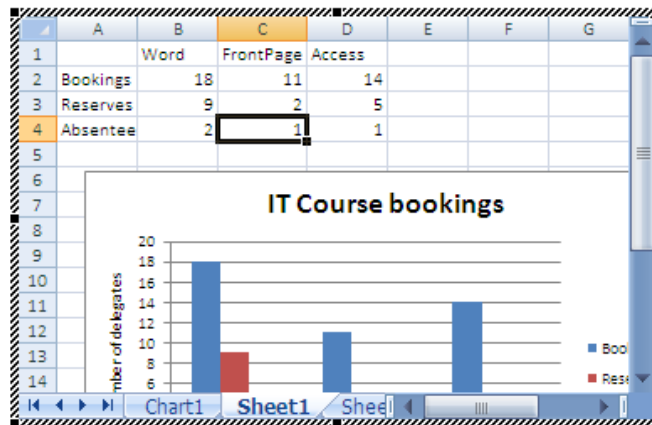


Now you can see separate sheets representing the Excel workbook.

The Word ribbon is replaced with the Excel ribbon offering the usual editing and formatting tools.



- Click **Sheet1** to see the data and make changes



- Change the data in cell **D3** to 7

The chart in the worksheet is updated.

- Select **Chart1** (the sheet containing the chart)
- Click away from the chart to de-select it

The chart in the document is updated to reflect the change in the data.

- Close the document without saving

LINKING WITH AN AUTOMATIC LINK

When an object (the chart) is linked, it can be updated automatically when the source data (in the Excel workbook) is modified. A link to the source data is stored within the document and a representation of the data is shown. Use linked objects if the size of the Word document has to be considered.



If you move, rename, or delete the data source, the link may be broken.

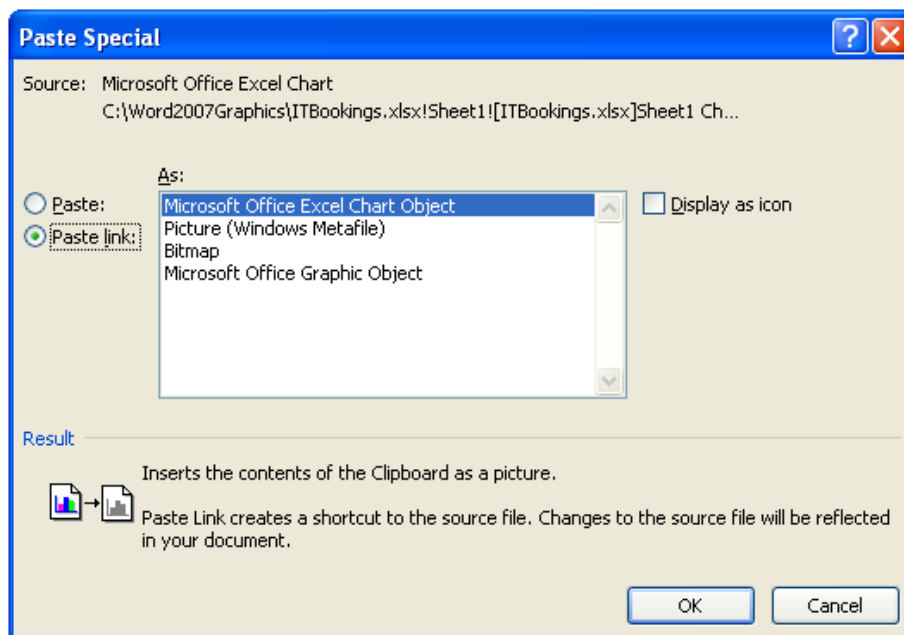
- Open a new blank document
- Switch to the **ITBookings** workbook which should still be open
- Select the chart
- Click the **Copy** button on the **Home** tab

In the Word document:

- Position the insertion point where you want to place the linked chart
- Click the bottom of the **Paste** button on the **Home** tab
- Click **Paste Special**

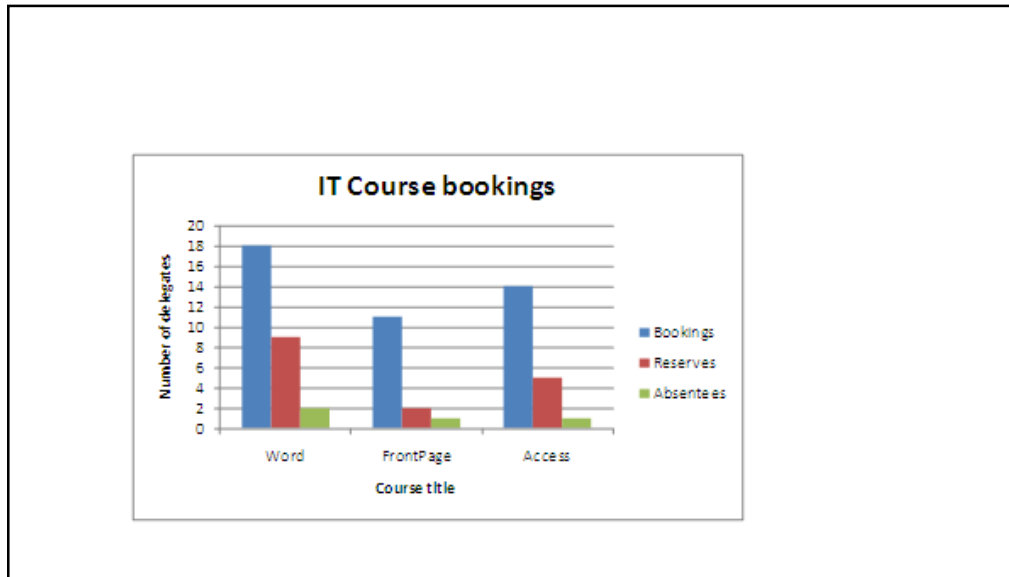
The Paste Special dialog box is displayed.

- Select the **Paste Link** option
- Select **Microsoft Office Excel Chart Object**



- Click **OK**

The chart is inserted in the Word document.



- Close Excel

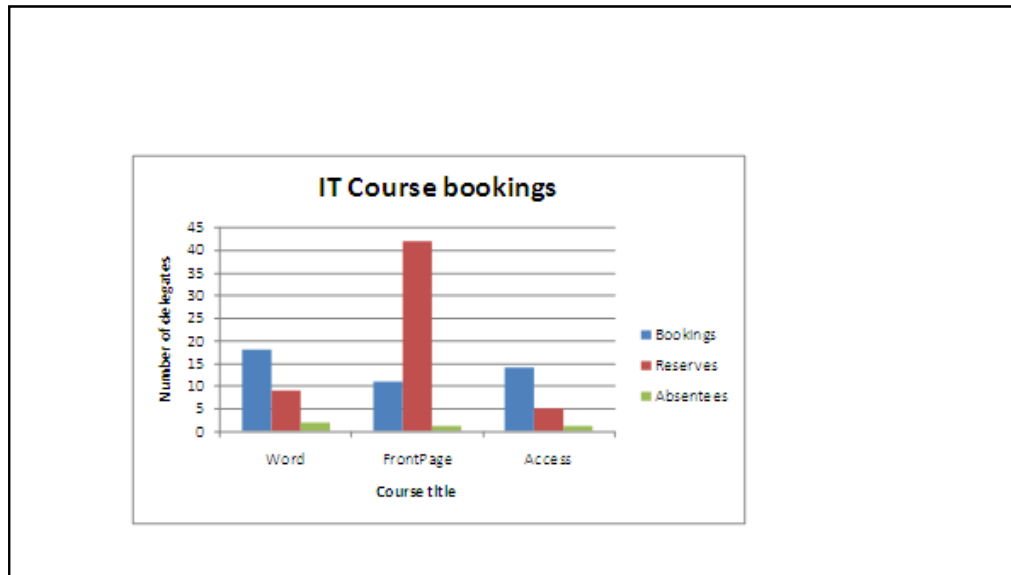
Next you will check that the link works by making a change to the data in the worksheet.

- Double click the chart

Excel is automatically opened along with the related workbook.

- Change the data in C3 (FrontPage Reserves) to 42
- Save and close the workbook
- Return to the Word file

Can you see the change you made?



If not, you will need to manually update the link.

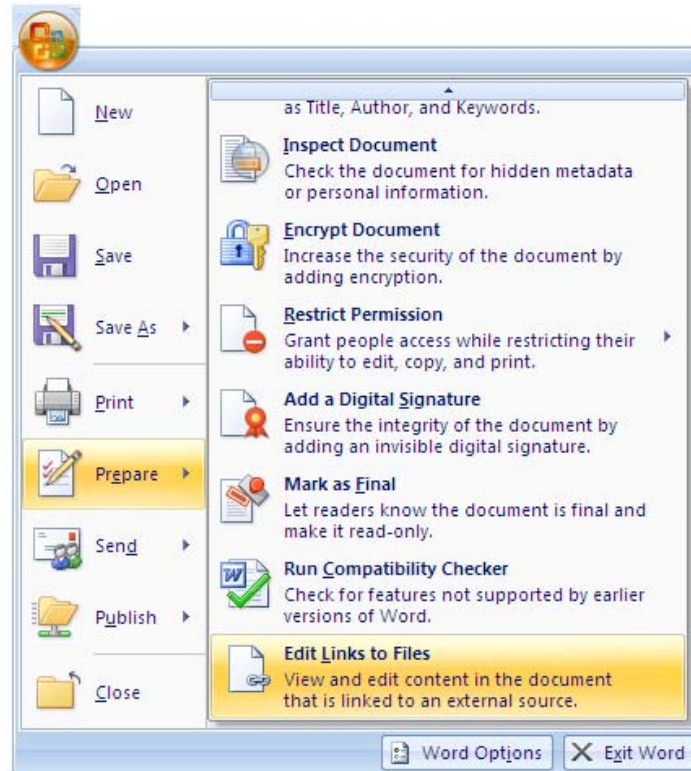
- Do not close the document

UPDATING LINKS

Word can update links either automatically or manually. Automatic update is the default.

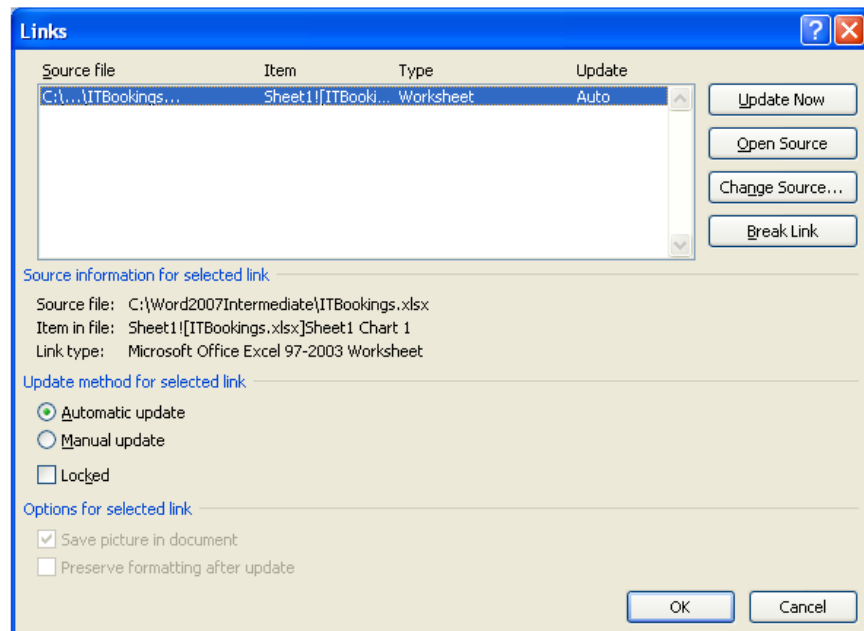
With automatic links, Word updates the links whenever you open the file containing the link and whenever the source information changes while the Word document is open.

- Click the **Office Button**
- Point to **Prepare**
- Scroll down the list and select **Edit Links to Files**



The Links dialog box is displayed.

Automatic
update



This dialog box displays all of the links in the active Word document. As you can see, this document has only one listed and it will be automatically updated if the Excel chart is changed.

If you would prefer to update the links yourself:

- Select **Manual update**
- Click **OK**

Test the manual link:

- Double click the chart to open the workbook in Excel
- Change the data in cell **C3** to **2**
- Click **Save** and then exit Excel

The chart should not have updated.

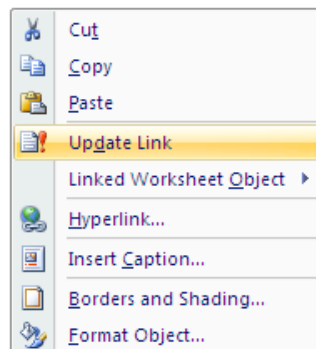
To update the link, either:

- Click the **Office Button**
- Prepare
- Edit Links and Files
- Click **Update Now**
- Click **OK**

The chart is updated.

or

- Point to the chart and click the right mouse button
- Choose **Update Link**



The chart is updated.

- Close the document without saving
- Close Word