Information Graphics: Graphs, Schematic Diagrams, Symbols and Signs.

The final kind of graphic we need to learn about performs a unique function and therefore sits in a category by itself. It is called information graphics.
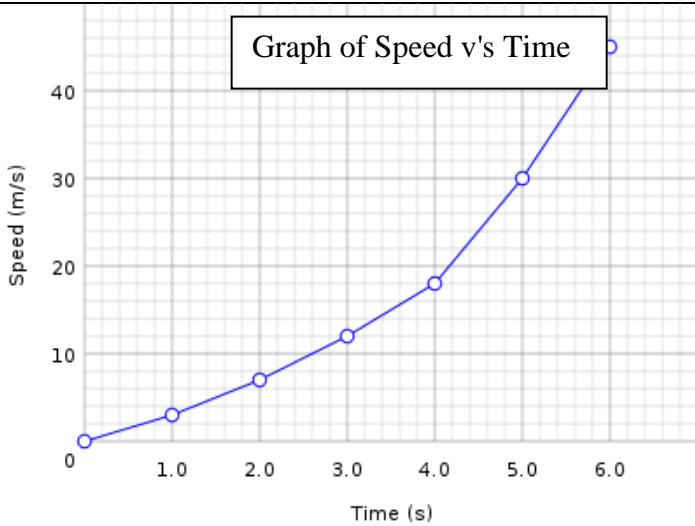
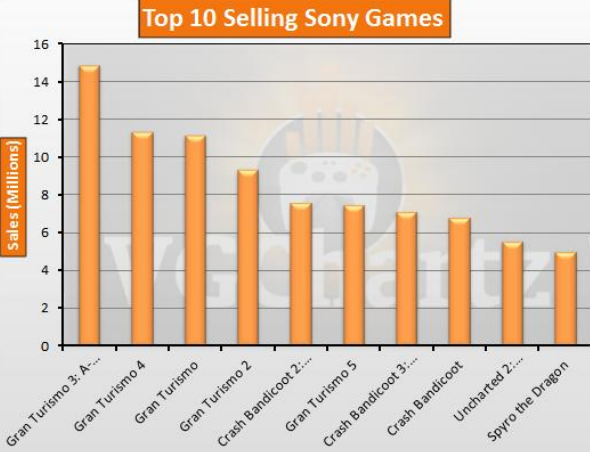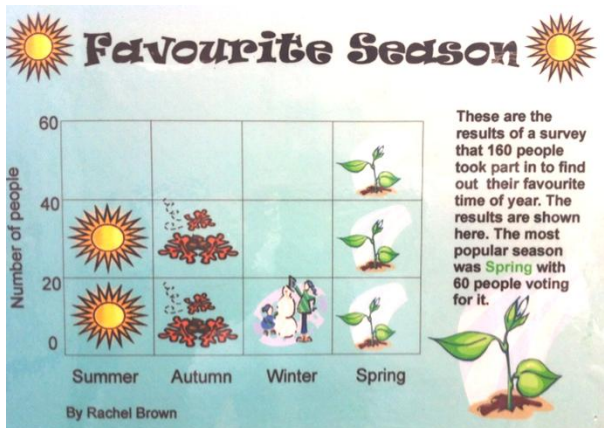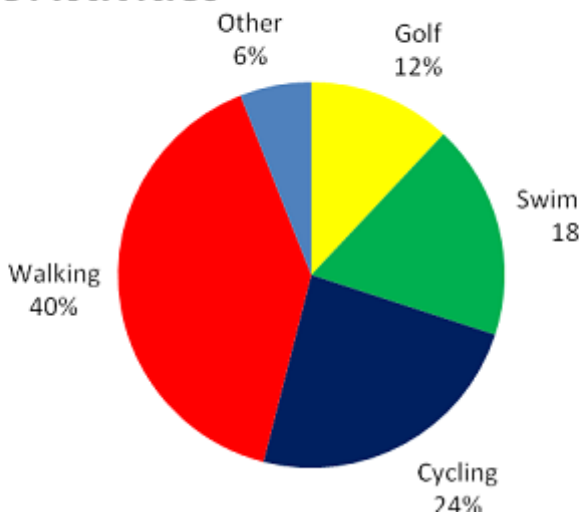There are 4 main types of information graphics

- graphs,
- schematic diagrams,.
- symbols,
- signs

Graphs

There are three main types of graph.

Although we will be focusing on **pictograms** you should be aware of the different types of graph and their purposes.

Type of Graph	What they are used for?	Example
Line Graphs	A line chart is often used to visualize a **trend in data over intervals of time**. In this example it shows the acceleration of an object over a period of time. Notice the graph has a **title**, a **label on the x-axis** (time**), a label on the y axis** (speed) and the values at each point are easy to read because of the **divisions on the axis** and the **indication of units** 's' for seconds) and 'm/s' (for metres per second)	 Graph of Speed v's Time

Bar Graphs	A **bar graph** is a chart that uses either horizontal or vertical bars to show **comparisons of quantities** between categories.	
Pictograms	A **pictogram** is similar to a bar chart because it **used to compare quantities of data**. However is often preferred by graphic designers because it is a more **eye-catching**.	
Pie Charts	Pie charts are often used to show **quantities in terms of percentages**. The larger the segment of the pie the larger the percentage of the total amount. Notice in this example the **title** (favourite activities, the **label to explain each segment** (e.g. walking) and the **quantity as a percentage**	

Schematic Diagrams

Schematic Diagram 1: A Flow Chart
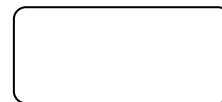
A flow chart shows the sequence of operations in technological products

Example: Flow Chart for a kettle   Symbols used in flowcharts

```
        Start

       Switch
        on

      Heater On
                          No
       Boiling
        Y/N
   Yes
       Switch
        Off

       Heater
        Off

        End
```
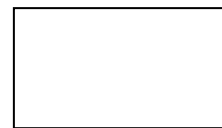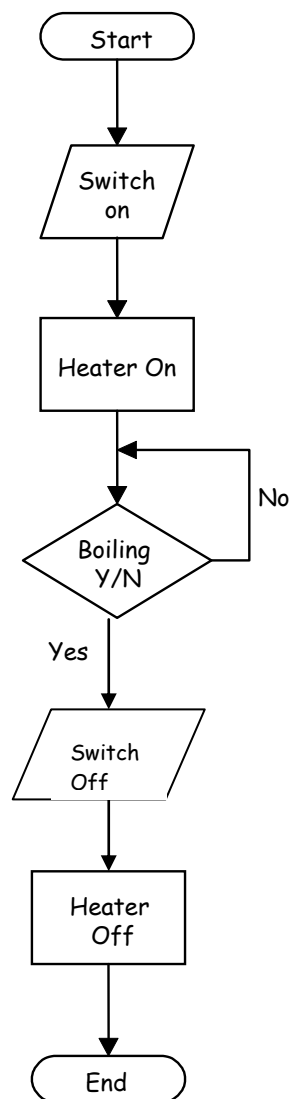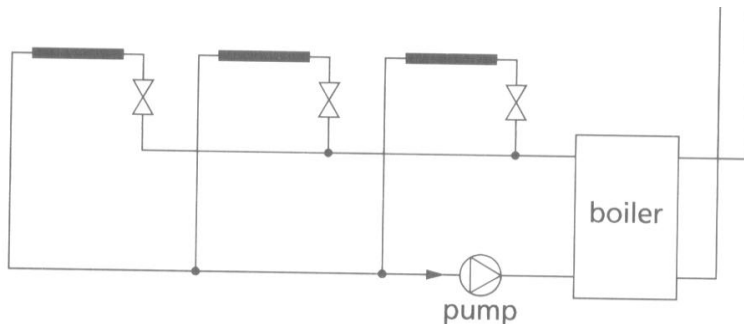
Process

Start/ Stop
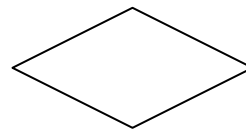
Input/Output

Decision

Schematic Diagram 2: Circuit Diagram

Circuit diagrams can be used for both electrical and plumbing systems. They show in diagramatic form how all the parts are connected.

Example: for part of a central heating system

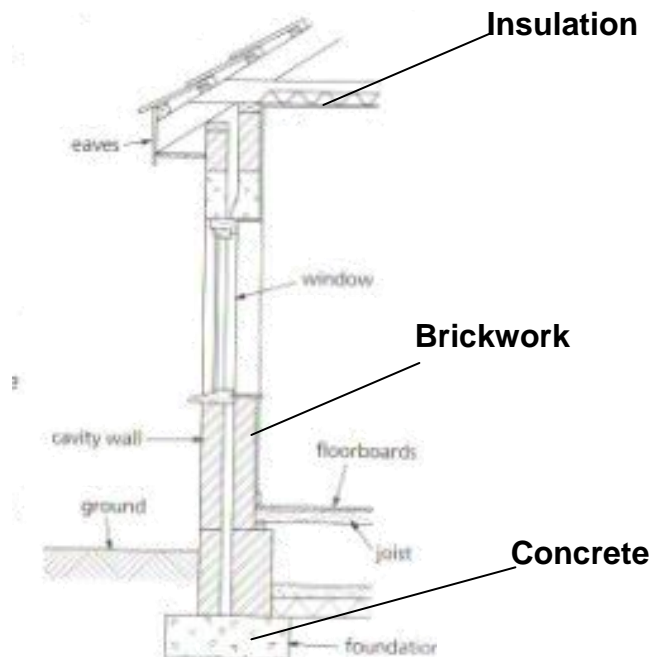Some symbols used in circuit diagrams

Two way valve

Radiator

boiler

pump

Schematic diagram 3: Sectional views of buildings

Sectional views of buildings show the different materials used in the construction
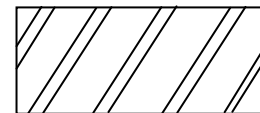
Example: Cross section of house with cavity wall

Some symbols used in circuit diagrams
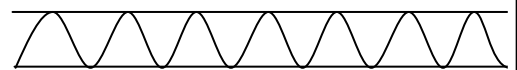
Insulation

Brickwork

Concrete

Insulation

eaves

window

Brickwork

cavity wall

floorboards

ground

joist

Concrete

foundation
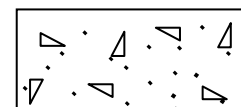
Other Symbols

Drawing Symbols
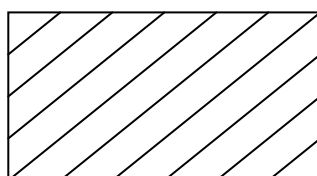
hatching

third angle projection symbol

Packaging Symbol

Kitemark
Symbol

Building Drawing Symbol

North
Symbol

Architectural Symbols
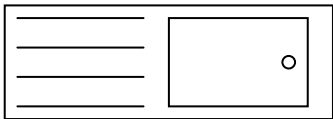
Sink top
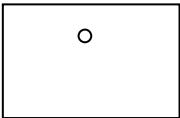
Sink
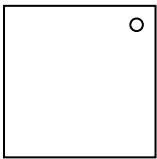
Shower tray
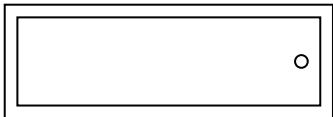
Bath

Radiator
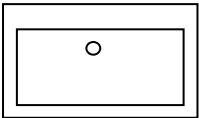
Washbasin

W.C.
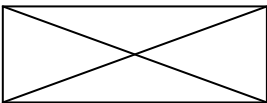
Sawn
timber
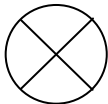
Brickwork

Bulb
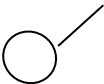
Switch
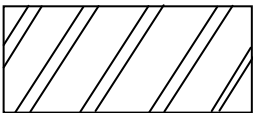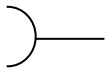
Socket
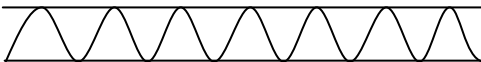
Insulation
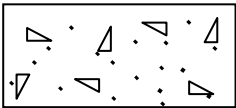
Concrete
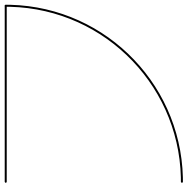
Door
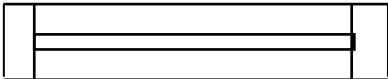
Window

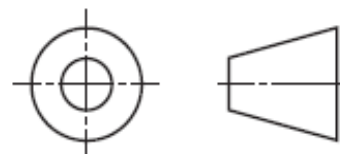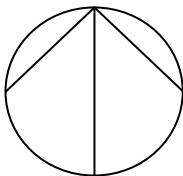# Warning Signs (forcolour version see Edmodo)

- These signs are yellow and black.
- They are normally triangular but can be other shapes.
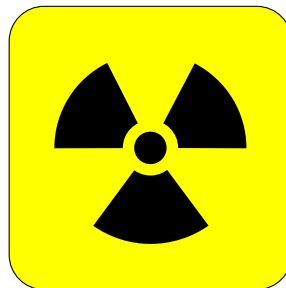
Signs - Mandatory signs

- These signs are blue in colour with white graphics.
- They give a positive instruction. In other words they tell you what to do rather than what not to do.

Safety Mask must be worn

Signs - Prohibition signs

- These signs are circular with a line across the circle.
- They have red lines and black graphics.

No smoking

Signs - Safety Signs

- These signs show a safe condition or direct people to a safe location.
- They are green in colour with white graphics

Assembly Point Signs

Information Graphics: Graphs, Schematic Diagrams, Symbols and Signs.

Q1 Look at the following signs shown below. Name the
1. type of sign,
2. colour 1
3. colour 2
used in each

1..

2..

3..

1..

2..

3…………………………………………...

1..

2..

3..

1..

2..

3…………………………………………...

Q3 Label the following architectural **symbols** shown at A, B and C

A _____

C _____

B _____
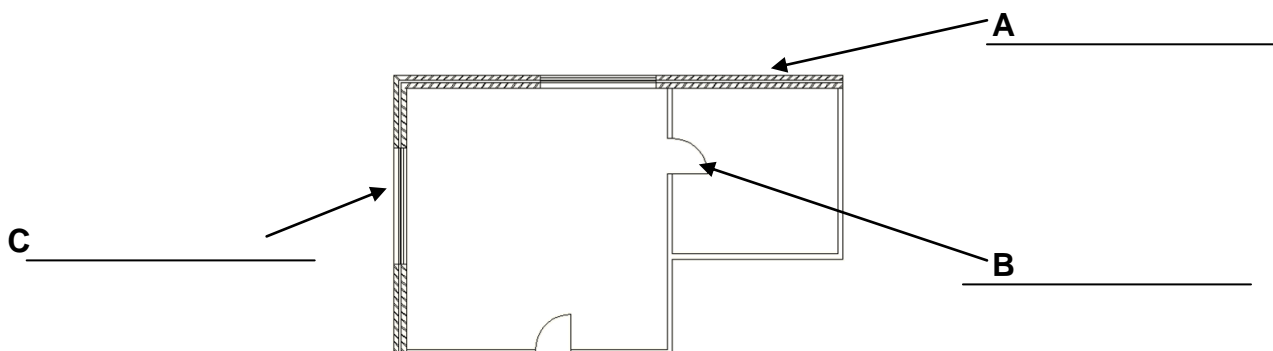
Q3 Write down the name and sketch the type of graph would be used in the following situations

Scenarios	**Name and sketch of the most appropriate Type of Graph** (add appropriate title to your axis, pie segments)
A graph which shows how **over a period of time** the number of mobile phones in the world has increased.	
The total amount of government spending in Britain is 100 billion pounds. The amount of government spending allocated to each government department as a proportion of the total amount.	
A graph which shows the quantities of different kinds of birds in a bird sanctuary. It is to be part of leaflet advertising the bird sanctuary so should be as eye-catching as possible	