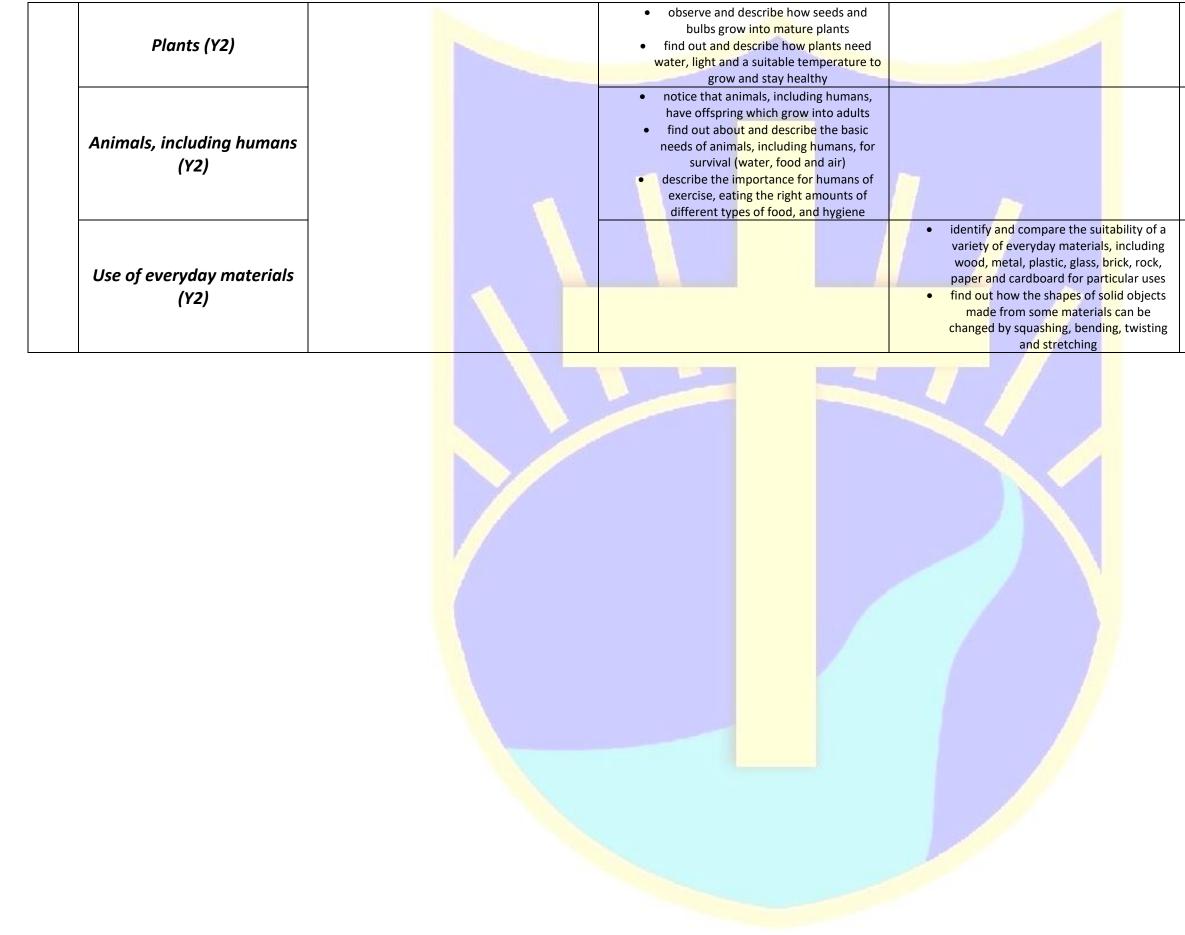
		Working Scientifically	Biology (inc. study of plants, animals and habitats)	Chemistry (inc. study of properties and behaviour of different materials)
	Plants (Y1)		 identify and name a variety of common wild and garden plants, including deciduous and evergreen trees identify and describe the basic structure of a variety of common flowering plants, including trees 	
Y1/2	Animals, including humans (Y1)	 asking simple questions and recognising that they can be answered in different ways observing closely, using simple equipment performing simple tests identifying and classifying using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions 	 identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals identify and name a variety of common animals that are carnivores, herbivores and omnivores describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets) identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense 	
	Everyday materials (Y1)			 distinguish between an object and the material from which it is made identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock describe the simple physical properties of a variety of everyday materials compare and group together a variety of everyday materials on the basis of their simple physical properties
	Seasonal changes (Y1)			
	Living things and their habitats (Y2)		 observe changes across the 4 seasons observe and describe weather associated with the seasons and how day length varies 	

Concepts and Content Organiser- Science

Physics (inc. the study of matter, energy and forces)

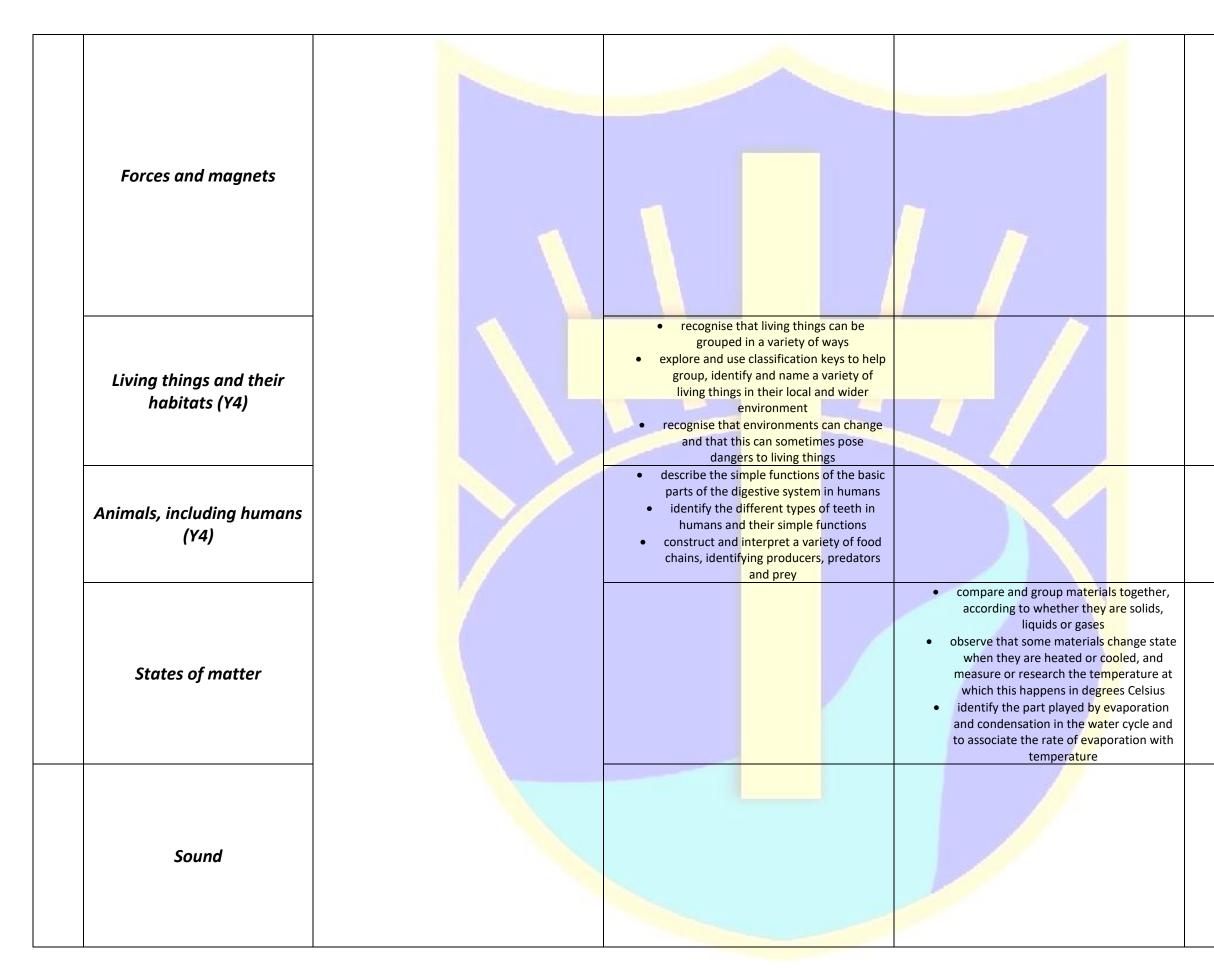
 observe changes across the 4 seasons
 observe and describe weather associated with the seasons and how day length varies



		Working Scientifically	Biology (inc. study of plants, animals and habitats)	Chemistry (inc. study of properties and behaviour of different materials)
Y3/4	Plants (Y3)	 asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers gathering, recording, classifying and presenting data in a variety of ways to help in answering questions recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings. 	 identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant investigate the way in which water is transported within plants explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal 	
	Animals, including humans (Y3)		 identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat identify that humans and some other animals have skeletons and muscles for support, protection and movement 	
	Rocks			 compare and group together different kinds of rocks on the basis of their appearance and simple physical properties describe in simple terms how fossils are formed when things that have lived are trapped within rock recognise that soils are made from rocks and organic matter
	Light			

Physics (inc. the study of matter, energy and forces)

٠	recognise that they need light in order to
	see things and that dark is the absence of
	light
•	notice that light is reflected from surfaces
٠	recognise that light from the sun can be
	dangerous and that there are ways to
	protect their eyes
•	recognise that shadows are formed when
	the light from a light source is blocked by
	an opaque object
٠	find patterns in the way that the size of
	shadows change

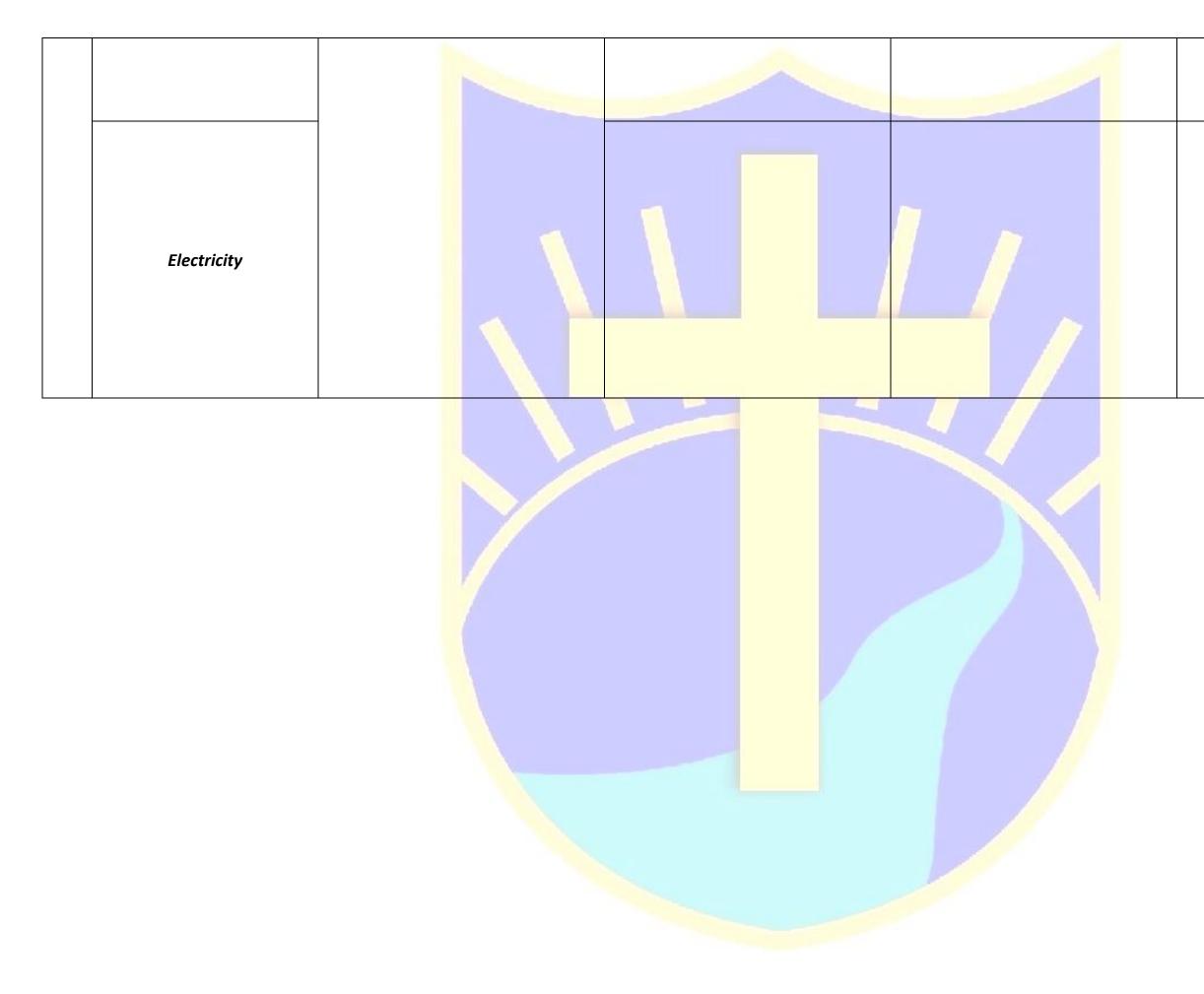


•	compare how things move on different
	surfaces

- notice that some forces need contact between 2 objects, but magnetic forces can act at a distance
- observe how magnets attract or repel each other and attract some materials and not others
- compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials
- describe magnets as having 2 poles
- predict whether 2 magnets will attract or repel each other, depending on which poles are facing

•	identify how sounds are made,
	associating some of them with something
	vibrating
•	recognise that vibrations from sounds
	travel through a medium to the ear

- find patterns between the pitch of a sound and features of the object that produced it
- find patterns between the volume of a sound and the strength of the vibrations that produced it

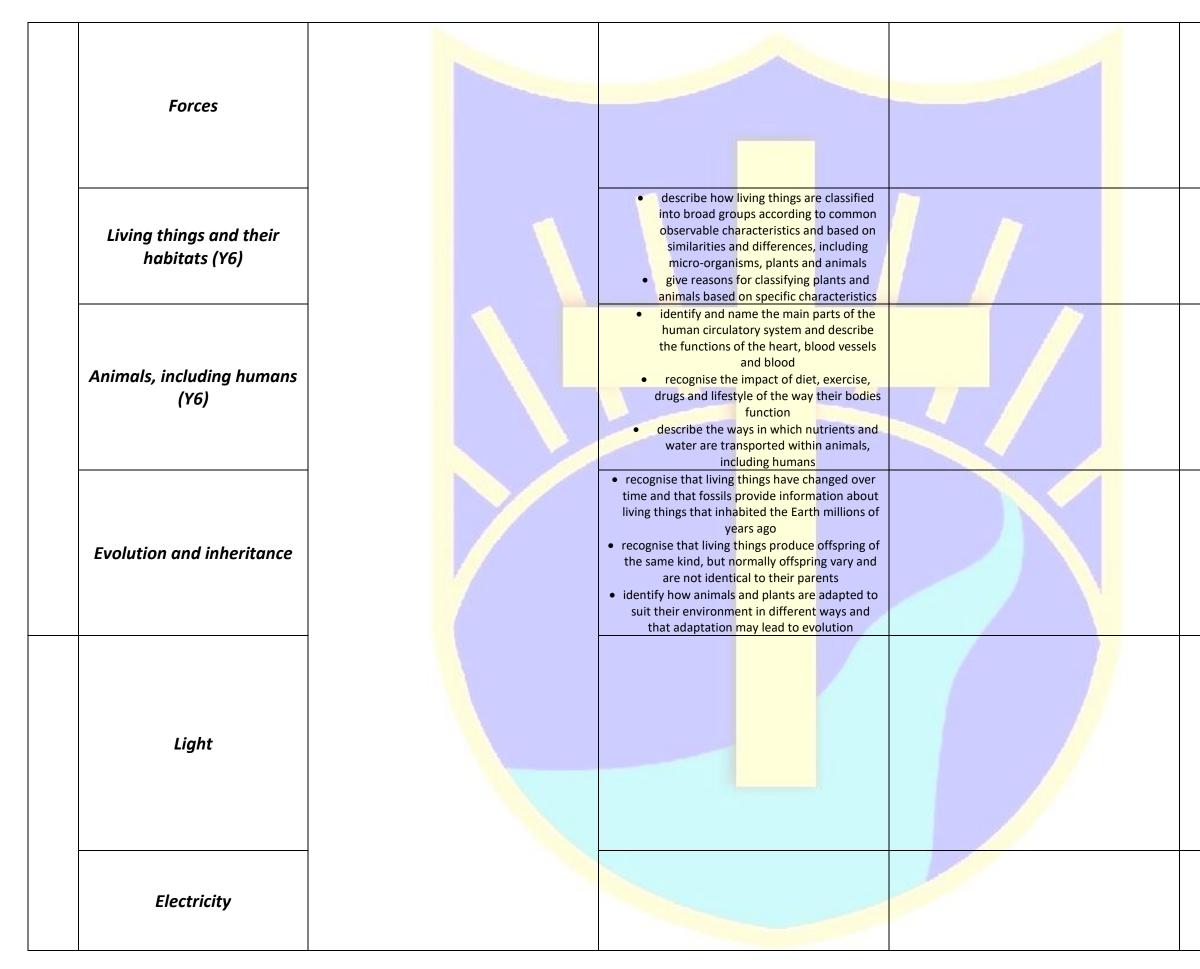


- recognise that sounds get fainter as the distance from the sound source increases
- identify common appliances that run on electricity
- construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
- recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- recognise some common conductors and insulators, and associate metals with being good conductors

		Working Scientifically	Biology (inc. study of plants, animals and habitats)	Chemistry (inc. study of properties and behaviour of different materials)
	Living things and their habitats (Y5)		 describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird describe the life process of reproduction in some plants and animals 	1
	Animals, including humans (Y5)		describe the changes as humans develop to old age	
Y5/6	States of Matter	 planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments 		 compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic demonstrate that dissolving, mixing and changes of state are reversible changes explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda
	Earth and Space			

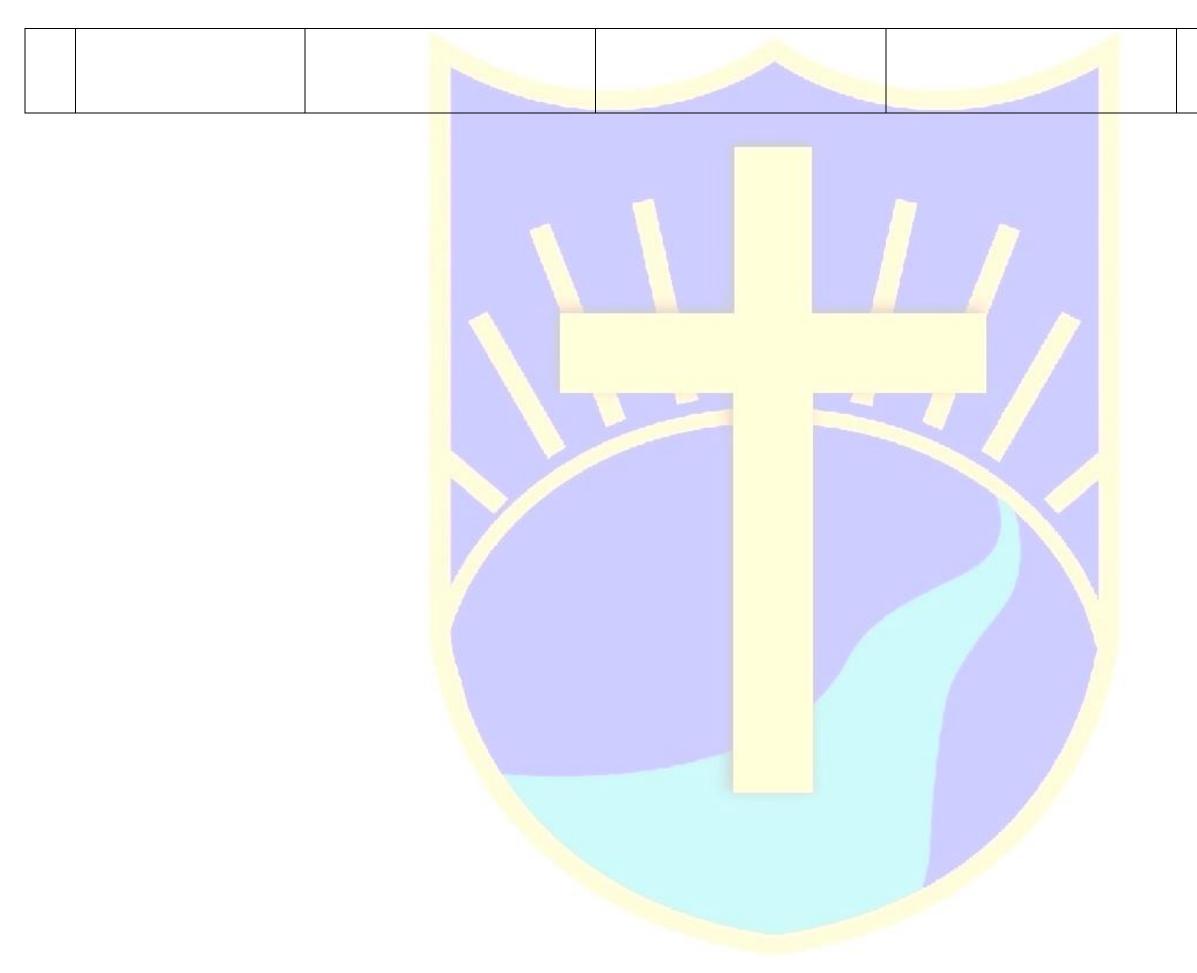
Physics (inc. the study of matter, energy and forces)

٠	describe the movement of the Earth and
	other planets relative to the sun in the
	solar system
٠	describe the movement of the moon
	relative to the Earth
•	describe the sun, Earth and moon as
	approximately spherical bodies
٠	use the idea of the Earth's rotation to
	explain day and night and the apparent
	movement of the sun across the sky



- explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect

٠	recognise that light appears to travel in
	straight lines
٠	use the idea that light travels in straight
	lines to explain that objects are seen
	because they give out or reflect light into
	the eye
٠	explain that we see things because light
	travels from light sources to our eyes or
	from light sources to objects and then to
	our eyes
٠	use the idea that light travels in straight
	lines to explain why shadows have the
	same shape as the objects that cast them
٠	associate the brightness of a lamp or the
	volume of a buzzer with the number and
	voltage of cells used in the circuit
٠	compare and give reasons for variations
	in how components function, including
	the brightness of bulbs, the loudness of



buzzers and the on/off position of
switches

 use recognised symbols when representing a simple circuit in a diagram