



Barcombe - Hamsey - Plumpton Skylark Federation

Skylark Curriculum- Science KS2

Science coverage: all statutory elements of the National Curriculum are included.

The SC title before each statement indicates the year group to which each specific objective is allocated. All children in, for example, a Year 2/3 class should follow the Y2/3 plan and activities should plan for all the objectives to be taught to all the children. Teachers will need to adapt activities to meet the needs of older or younger children, but the objectives must be taught to all.

Science Y4, Y5 & Y6

Year A

Year B

Year C

Working Scientifically

During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- 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.

Living Things and their Habitats

Sound

Living Things and their Habitats

Sc4/2.1a recognise that living things can be grouped in a variety of ways

Sc4/2.1b explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment

Sc6/2.1a describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals

Sc6/2.1b give reasons for classifying plants and animals based on specific characteristics.

Sc4/4.1a identify how sounds are made, associating some of them with something vibrating
Sc4/4.1b recognise that vibrations from sounds travel through a medium to the ear

Sc4/4.1c find patterns between the pitch of a sound and features of the object that produced it
Sc4/4.1d find patterns between the volume of a sound and the strength of the vibrations that produced it.

Sc4/4.1e recognise that sounds get fainter as the distance from the sound source increases

Sc4/2.1c recognise that environments can change and that this can sometimes pose dangers to living things.

States of Matter	Living Things and their habitats	Animals including humans
<p>Sc4/3.1a compare and group materials together, according to whether they are solids, liquids or gases</p> <p>Sc4/3.1b observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)</p> <p>Sc4/3.1c identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p>	<p>Sc5/2.1a describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</p> <p>Sc5/2.1b describe the life process of reproduction in some plants and animals.</p>	<p>Sc4/2.2a describe the simple functions of the basic parts of the digestive system in humans</p> <p>Sc4/2.2b identify the different types of teeth in humans and their simple functions</p> <p>Sc4/2.2c construct and interpret a variety of food chains, identifying producers, predators and prey.</p> <p>Sc5/2.2a describe the changes as humans develop to old age.</p>
Properties and Changes of Materials	Forces	Electricity
<p>Sc5/3.1a 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</p> <p>Sc5/3.1b know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</p> <p>Sc5/3.1c use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating</p> <p>Sc5/3.1d give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</p>	<p>Sc5/4.2a explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object</p> <p>Sc5/4.2b identify the effects of air resistance, water resistance and friction, that act between moving surfaces</p> <p>Sc5/4.2c recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect</p>	<p>Sc4/4.2a identify common appliances that run on electricity</p> <p>Sc4/4.2b construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</p> <p>Sc4/4.2c 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</p> <p>Sc4/4.2d recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</p>

<p>Sc5/3.1e demonstrate that dissolving, mixing and changes of state are reversible changes</p> <p>Sc5/3.1f 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.</p>		<p>Sc4/4.2e recognise some common conductors and insulators, and associate metals with being good conductors.</p>
<p>Earth and Space</p>	<p>Animals including humans</p>	<p>Evolution</p>
<p>Sc5/4.1a describe the movement of the Earth, and other planets, relative to the Sun in the solar system</p> <p>Sc5/4.1b describe the movement of the Moon relative to the Earth</p> <p>Sc5/4.1c describe the Sun, Earth and Moon as approximately spherical bodies</p> <p>Sc5/4.1d use the idea of the Earth's rotation to explain day and night, and the apparent movement of the sun across the sky.</p>	<p>Sc6/2.2a identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood</p> <p>Sc6/2.2b recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function</p> <p>Sc6/2.2c describe the ways in which nutrients and water are transported within animals, including humans.</p>	<p>Sc6/2.3a recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago</p> <p>Sc6/3.2b recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</p> <p>Sc6/2.3c identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p>
	<p>Light</p>	
	<p>Sc6/4.1a recognise that light appears to travel in straight lines</p> <p>Sc6/4.1b 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</p> <p>Sc6/4.1c explain that we see things because light</p>	

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	<p>travels from light sources to our eyes or from light sources to objects and then to our eyes</p> <p>Sc6/4.1d use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them</p> <p>Sc6/4.1a recognise that light appears to travel in straight lines</p> <p>Sc6/4.1b 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</p> <p>Sc6/4.1c 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</p> <p>Sc6/4.1d use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them</p>	
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