



## **Barcombe - Hamsey - Plumpton Skylark Federation**

### **Skylark Curriculum- Science**

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 Y1 & Y2

**Year A**

**Year B**

### 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.

### Everyday Materials

### Plants

Sc1/3.1a distinguish between an object and the material from which it is made

Sc1/3.1b identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock

Sc1/3.1c describe the simple physical properties of a variety of everyday materials

Sc1/2.1a identify and name a variety of common wild and garden plants, including deciduous and evergreen trees

Sc1/2.1b identify and describe the basic structure of a variety of common flowering plants, including trees

<p>Sc1/3.1d compare and group together a variety of everyday materials on the basis of their simple physical properties</p>	
<p><b>Seasonal Changes</b></p>	<p><b>Animals Including Humans</b></p>
<p>Sc1/4.1a observe changes across the 4 seasons</p> <p>Sc1/4.1b observe and describe weather associated with the seasons and how day length varies.</p>	<p>Sc1/2.2c describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)</p> <p>Sc1/2.2d identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p> <p>Sc2/2.3a notice that animals, including humans, have offspring which grow into adults</p>
<p><b>Animals Including Humans</b></p>	<p><b>Living Things and Their Habitats</b></p>
<p>Sc1/2.2a identify and name a variety of common animals including, fish, amphibians, reptiles, birds and mammals</p> <p>Sc1/2.2b identify and name a variety of common animals that are carnivores, herbivores and omnivores</p>	<p>Sc2/2.1d describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p>

Living Things and Their Habitats	Uses of Everyday Materials
<p>Sc2/2.1a explore and compare the differences between things that are living, dead, and things that have never been alive</p> <p>Sc2/2.1b identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other</p> <p>Sc2/2.1c identify and name a variety of plants and animals in their habitats, including microhabitats</p>	<p>Sc2/3.1a identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for different uses</p> <p>Sc2/3.1b compare how things move on different surfaces.</p> <p>Sc2/3.1c find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</p>
Plants	N/a
<p>Sc2/2.2a observe and describe how seeds and bulbs grow into mature plants</p> <p>Sc2/2.2b find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p>	

## Science Y2 & 3

**Year A**

**Year B**

### Working Scientifically

Pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- 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.

#### Plants

Sc2/2.2a observe and describe how seeds and bulbs grow into mature plants

Sc2/2.2b find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

#### Animals including humans

Sc2/2.3a notice that animals, including humans, have offspring which grow into adults

Sc2/2.3b find out about and describe the basic needs of animals, including humans, for survival (water, food and air)

Sc2/2.3c describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

	Sc3/2.2b identify that humans and some other animals have skeletons and muscles for support, protection and movement.
<b>Living things and their habitats</b>	<b>Uses of everyday materials</b>
<p>Sc2/2.1a explore and compare the differences between things that are living, dead, and things that have never been alive</p> <p>Sc2/2.1b identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other</p> <p>Sc2/2.1c identify and name a variety of plants and animals in their habitats, including microhabitats</p>	<p>Sc2/3.1a identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for different uses</p> <p>Sc2/3.1b compare how things move on different surfaces.</p> <p>Sc2/3.1c find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</p>
<b>Rocks</b>	<b>Plants</b>
<p>Sc3/3.1a compare and group together different kinds of rocks on the basis of their appearance and simple physical properties</p> <p>Sc3/3.1b describe in simple terms how fossils are formed when things that have lived are trapped within rock</p> <p>Sc3/3.1c recognise that soils are made from rocks and organic matter.</p>	<p>Sc3/2.1a identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</p> <p>Sc3/2.1b 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</p> <p>Sc3/2.1c investigate the way in which water is transported within plants</p> <p>Sc3/2.1d explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p>

Light	Forces and Magnets
<p>Sc3/4.1a recognise that they need light in order to see things and that dark is the absence of light</p> <p>Sc3/4.1b notice that light is reflected from surfaces</p> <p>Sc3/4.1c recognise that light from the sun can be dangerous and that there are ways to protect their eyes</p> <p>Sc3/4.1d recognise that shadows are formed when the light from a light source is blocked by a solid object</p> <p>Sc3/4.1e find patterns in the way that the size of shadows change.</p>	<p>Sc3/4.2a compare how things move on different surfaces</p> <p>Sc3/4.2b notice that some forces need contact between 2 objects, but magnetic forces can act at a distance</p> <p>Sc3/4.2c observe how magnets attract or repel each other and attract some materials and not others</p> <p>Sc3/4.2d 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</p> <p>Sc3/4.2e describe magnets as having 2 poles</p> <p>Sc3/4.2f predict whether 2 magnets will attract or repel each other, depending on which poles are facing.</p>