



## Curriculum Progression Map: Science

**Science Intent:** Science teaching at Krishna Avanti Primary School Harrow aims to give all children a strong understanding of the world around them whilst acquiring specific skills and knowledge to help them think scientifically, to gain an understanding of scientific processes and an understanding of the uses and implications of science, today and for the future.

The three-fold path of the Avanti Way are core to the teaching of all subjects, including science. Our science curriculum fosters a healthy curiosity in children about our universe and promotes respect for the living and non-living. We strive to equip our children with sufficient knowledge, concepts, skills, and positive attitudes to understand that Science has changed our lives and the direction of society whilst increasing their awareness that the contribution we make is vital to the world's future prosperity. We prepare our children to be global citizen now and in their future roles within a global community.

Key Area	Year R	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Animals, including Humans</b>	<p><b>Understanding the World</b></p> <ul style="list-style-type: none"> <li>Explore the natural world around them.</li> <li>Describe what they see, hear and feel while they are outside.</li> <li>Recognise some environments that are different to the one in which they live.</li> <li>Understand the effect of changing seasons on the natural world around them.</li> </ul> <p>ELG: Listening, Attention and Understanding</p> <ul style="list-style-type: none"> <li>Make comments about what they have heard and</li> </ul>	<p style="text-align: center;"><u>Spring 1-2</u></p> <p style="text-align: center;"><u>AH1</u></p> <p>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</p> <p style="text-align: center;"><u>AH2</u></p> <p>Identify and name a variety of common animals that are carnivores, herbivores and omnivores</p> <p style="text-align: center;"><u>AH3</u></p>	<p style="text-align: center;"><u>Summer 2</u></p> <p style="text-align: center;"><u>AH1</u></p> <p>Notice that animals, including humans, have offspring which grow into adults</p> <p style="text-align: center;"><u>AH2</u></p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</p> <p style="text-align: center;"><u>AH3</u></p>	<p style="text-align: center;"><u>Spring 1-2</u></p> <p style="text-align: center;"><u>AH1</u></p> <p>Identify that animals, including humans, need the right types and amount of nutrition</p> <p style="text-align: center;"><u>AH2</u></p> <p>Know that they cannot make their own food; they get nutrition from what they eat</p> <p style="text-align: center;"><u>AH3</u></p>	<p style="text-align: center;"><u>Spring 2</u></p> <p style="text-align: center;"><u>AH1</u></p> <p>Describe the simple functions of the basic parts of the digestive system in humans</p> <p style="text-align: center;"><u>AH2</u></p> <p>Identify the different types of teeth in humans and their simple functions</p> <p style="text-align: center;"><u>AH3</u></p> <p>Construct and interpret a variety</p>	<p style="text-align: center;"><u>Summer 2</u></p> <p style="text-align: center;"><u>AH1</u></p> <p>Describe the changes as humans develop to old age.</p> <p style="text-align: center;"><u>AH2</u></p> <p>Draw a timeline to indicate stages in the growth and development of humans.</p> <p style="text-align: center;"><u>AH3</u></p> <p>Learn about the changes</p>	<p style="text-align: center;"><u>Autumn 1-2</u></p> <p style="text-align: center;"><u>AH1</u></p> <p>Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood</p> <p style="text-align: center;"><u>AH2</u></p> <p>Recognise the impact of diet, exercise, drugs</p>



	<p>ask questions to clarify their understanding.</p> <p>ELG: Managing Self</p> <ul style="list-style-type: none"> <li>• Manage their own basic hygiene including dressing, going to the toilet and understanding the importance of healthy food choices.</li> </ul> <p>ELG: The Natural World</p> <ul style="list-style-type: none"> <li>• Explore the natural world around them, making observations and drawing pictures of animals and plants;</li> <li>• Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class;</li> <li>• Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</li> </ul>	<p>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</p> <p><b>AH4</b></p> <p>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><b><u>KEY VOCABULARY</u></b> <b>Animals including Humans</b></p> <p>Fish, Reptiles, Mammals, Birds, Amphibians (+ examples of each) Herbivore, Omnivore, Carnivore, Leg, Arm, Elbow, Head, Ear, Nose, Back, Wings, Beak</p>	<p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p><b><u>. KEY VOCABULARY</u></b></p> <p><b>Animals including humans</b></p> <p>Survival, Water, Air, Food, Adult, Baby, Offspring, Kitten, Calf, Puppy, Exercise, Hygiene</p>	<p>Identify that humans and some animals have skeletons and muscles for support, protection and movement.</p> <p><b><u>KEY VOCABULARY</u></b></p> <p><b>Animals including humans</b></p> <p>Movement, Muscles, Bones, Skull, Nutrition, Skeletons,</p>	<p>of food chains, identifying producers, predators and prey.</p> <p><b><u>KEY VOCABULARY</u></b></p> <p><b>Animals including humans</b></p> <p>Mouth, Tongue, Teeth, Oesophagus, Stomach, Small Intestine, Large Intestine, Herbivore, Carnivore, Canine, Incisor, Molar</p>	<p>experienced in puberty.</p> <p><b><u>KEY VOCABULARY</u></b></p> <p><b>Animals including humans</b></p> <p>Foetus, Embryo, Womb, Gestation, Baby, Toddler, Teenager, Elderly, Growth, Development, Puberty</p>	<p>and lifestyle on the way their bodies function</p> <p><b>AH3</b></p> <p>Describe the ways in which nutrients and water are transported within animals, including humans.</p> <p><b><u>KEY VOCABULARY</u></b></p> <p><b>Animals including humans</b></p> <p>Circulatory, Heart, Blood Vessels, Veins, Arteries, Oxygenated, Deoxygenated, Valve, Exercise, Respiration</p>
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Key Area	Year 2	Year 4	Year 5	Year 6
<b>Living Things and their Habitats</b>	<p style="text-align: center;"><b><u>Autumn 1-2</u></b></p> <p style="text-align: center;"><b><u>LH1</u></b> Explore and compare the differences between things that are living, dead, and things that have never been alive.</p> <p style="text-align: center;"><b><u>LH2</u></b> Identify that most living things live in habitats to which they are suited.</p> <p style="text-align: center;"><b><u>LH3</u></b> 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 style="text-align: center;"><b><u>LH4</u></b> Identify and name a variety of plants and animals in their habitats, including micro-habitats.</p> <p style="text-align: center;"><b><u>LH5</u></b> Describe how animals obtain their food from plants and other animals.</p> <p style="text-align: center;"><b><u>LH6</u></b> Understand a simple food chain and identify and name different sources of food.</p> <p style="text-align: center;"><b><u>KEY VOCABULARY</u></b> <b>Living things and their habitats</b> Living, Dead, Habitat, Energy, Food chain, Predator, Prey, Woodland, Pond, Desert.</p>	<p style="text-align: center;"><b><u>Spring 1</u></b></p> <p style="text-align: center;"><b><u>LH1</u></b> Recognise that living things (including those in the locality) can be grouped in a variety of ways.</p> <p style="text-align: center;"><b><u>LH2</u></b> Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</p> <p style="text-align: center;"><b><u>LH3</u></b> Recognise that environments can change and that this can sometimes pose dangers to living things.</p> <p style="text-align: center;"><b><u>KEY VOCABULARY</u></b> <b>Living things and their habitats</b> Vertebrates, Fish, Amphibians, Reptiles, Birds, Mammals, Invertebrates, Snails, Slugs, Worms, Spiders, Insects, Environment, Habitats</p>	<p style="text-align: center;"><b><u>Summer 1</u></b></p> <p style="text-align: center;"><b><u>LH1</u></b> Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p> <p style="text-align: center;"><b><u>LH2</u></b> Describe the life process of reproduction in some plants and animals.</p> <p style="text-align: center;"><b><u>KEY VOCABULARY</u></b> <b>Living things and their habitats</b> Mammal, Reproduction, Insect, Amphibian, Bird, Offspring</p>	<p style="text-align: center;"><b><u>Spring 1</u></b></p> <p style="text-align: center;"><b><u>LH1</u></b> 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.</p> <p style="text-align: center;"><b><u>LH2</u></b> Give reasons for classifying plants and animals based on specific characteristics.</p> <p style="text-align: center;"><b><u>KEY VOCABULARY</u></b> <b>Living things and their habitats</b> Classification, Vertebrates, Invertebrates, Micro-organisms, Amphibians, Reptiles, Mammals, Insects</p>



Key Area	Year 1	Year 2	Year 4	Year 5
<b>Materials</b>	<p style="text-align: center;"><u>Autumn 1-2</u></p> <p style="text-align: center;">MATERIALS</p> <p style="text-align: center;"><u>EM1</u></p> <p>Distinguish between an object and the material from which it is made</p> <p style="text-align: center;"><u>EM2</u></p> <p>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p> <p style="text-align: center;"><u>EM3</u></p> <p>Describe the simple physical properties of a variety of everyday materials</p> <p style="text-align: center;"><u>EM4</u></p> <p>Compare and group together a variety of everyday materials on the basis of their simple physical properties</p>	<p style="text-align: center;"><u>Spring 1-2</u></p> <p style="text-align: center;">MATERIALS AND USES</p> <p style="text-align: center;"><u>EM1</u></p> <p>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</p> <p style="text-align: center;"><u>EM2</u></p> <p>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</p> <p style="text-align: center;"><u>KEY VOCABULARY</u></p> <p><b>Everyday materials and their uses</b> Hard, Soft, Stretchy, Stiff, Shiny, Dull, Rough, Smooth, Bendy, Waterproof, Absorbent, Opaque, Transparent Brick, Paper, Fabrics, Squashing, Bending, Twisting, Stretching Elastic, Foil</p>	<p style="text-align: center;"><u>Autumn 1</u></p> <p style="text-align: center;">STATES OF MATTER</p> <p style="text-align: center;"><u>SM1</u></p> <p>Explore a variety of everyday materials and develop simple descriptions of the states of matter</p> <p style="text-align: center;"><u>SM2</u></p> <p>Compare and group materials together, according to whether they are solids, liquids or gases</p> <p style="text-align: center;"><u>SM3</u></p> <p>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 style="text-align: center;"><u>KEY VOCABULARY</u></p> <p><b>States of Matter</b> Solid, Liquid, Gas, Evaporation, Condensation,</p>	<p style="text-align: center;"><u>Spring 2</u></p> <p style="text-align: center;">PROPERTIES AND CHANGES OF MATERIALS</p> <p style="text-align: center;"><u>PM1</u></p> <p>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 style="text-align: center;"><u>PM2</u></p> <p>Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</p> <p style="text-align: center;"><u>PM3</u></p> <p>Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating</p> <p style="text-align: center;"><u>PM4</u></p> <p>Give reasons, based on evidence from comparative and fair tests, for the</p>



	<p style="text-align: center;"><b><u>KEY VOCABULARY</u></b></p> <p style="text-align: center;"><b>Materials</b> Wood, Plastic, Glass, Paper, Water, Metal, Rock, Hard, Soft, Bendy, Rough, Smooth</p>		<p>Particles, Temperature, Freezing, Heating</p>	<p>particular uses of everyday materials, including metals, wood and plastic</p> <p style="text-align: center;"><b><u>PM5</u></b></p> <p>Demonstrate that dissolving, mixing and changes of state are reversible changes</p> <p style="text-align: center;"><b><u>PM6</u></b></p> <p>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 style="text-align: center;"><b><u>KEY VOCABULARY</u></b></p> <p><b>Properties and changes of materials</b> Hardness, Solubility, Transparency, Conductivity, Magnetic, Filter, Evaporation, Dissolving, Mixing</p>
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Key Area	Year 1	Year 2	Year 3
<b>Plants</b>	<p style="text-align: center;"><b><u>Summer 1</u></b></p> <p style="text-align: center;"><b><u>P1</u></b></p> <p>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p style="text-align: center;"><b><u>P2</u></b></p> <p>Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p style="text-align: center;"><b><u>KEY VOCABULARY</u></b></p> <p style="text-align: center;"><b>Plants</b></p> <p>Deciduous, Evergreen trees, Leaves, Flowers (blossom), Petals, Fruit, Roots, Bulb, Seed, Trunk,</p>	<p style="text-align: center;"><b><u>Summer 1</u></b></p> <p style="text-align: center;"><b><u>P1</u></b></p> <p>Observe and describe how seeds and bulbs grow into mature plants</p> <p style="text-align: center;"><b><u>P2</u></b></p> <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p style="text-align: center;"><b><u>KEY VOCABULARY</u></b></p> <p style="text-align: center;"><b>Plants</b></p> <p>Seeds, Bulbs, Water, Light, Temperature, Growth</p>	<p style="text-align: center;"><b><u>Summer 1</u></b></p> <p style="text-align: center;"><b><u>P1</u></b></p> <p>Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</p> <p style="text-align: center;"><b><u>P2</u></b></p> <p>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 style="text-align: center;"><b><u>P3</u></b></p> <p>Investigate the way in which water is transported within plants</p> <p style="text-align: center;"><b><u>P4</u></b></p> <p>Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p> <p style="text-align: center;"><b><u>P5</u></b></p> <p>Know that plants make their own food.</p> <p style="text-align: center;"><b><u>KEY VOCABULARY</u></b></p> <p style="text-align: center;"><b>Plants</b></p> <p>Air, Light, Water, Nutrients, Soil, Reproduction, Transportation, Dispersal, Pollination, Flower</p>



Key Area	Year 3	Year 5
<b>Forces and magnets</b>	<p style="text-align: center;"><b><u>Autumn 2</u></b></p> <p style="text-align: center;"><b><u>FM1</u></b></p> <p style="text-align: center;">Compare how things move on different surfaces</p> <p style="text-align: center;"><b><u>FM2</u></b></p> <p style="text-align: center;">Notice that some forces need contact between two objects, but magnetic forces can act at a distance</p> <p style="text-align: center;"><b><u>FM3</u></b></p> <p style="text-align: center;">Observe how magnets attract or repel each other and attract some materials and not others</p> <p style="text-align: center;"><b><u>FM4</u></b></p> <p style="text-align: center;">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 style="text-align: center;"><b><u>FM5</u></b></p> <p style="text-align: center;">Describe magnets as having two poles</p> <p style="text-align: center;"><b><u>FM6</u></b></p> <p style="text-align: center;">Predict whether two magnets will attract or repel each other, depending on which poles are facing.</p> <p style="text-align: center;"><b><u>KEY VOCABULARY</u></b> <b>Forces and magnets</b> Magnetic, Force, Contact, Attract, Repel, Friction, Poles, Push, Pull</p>	<p style="text-align: center;"><b><u>Autumn 2 – Spring 1</u></b></p> <p style="text-align: center;"><b><u>F1</u></b></p> <p style="text-align: center;">Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object</p> <p style="text-align: center;"><b><u>F2</u></b></p> <p style="text-align: center;">Identify the effects of air resistance, water resistance and friction, that act between moving surfaces</p> <p style="text-align: center;"><b><u>F3</u></b></p> <p style="text-align: center;">Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p> <p style="text-align: center;"><b><u>KEY VOCABULARY</u></b></p> <p style="text-align: center;"><b>Forces</b> Air resistance, Water resistance, Friction, Gravity, Newton, Gears, Pulleys</p>



Key Area	Year 3	Year 6
<b>Light</b>	<p style="text-align: center;"><b><u>Summer 2</u></b></p> <p style="text-align: center;"><b><u>L1</u></b></p> <p>Recognise that they need light in order to see things and that dark is the absence of light</p> <p style="text-align: center;"><b><u>L2</u></b></p> <p>Notice that light is reflected from surfaces</p> <p style="text-align: center;"><b><u>L3</u></b></p> <p>Recognise that light from the sun can be dangerous and that there are ways to protect their eyes</p> <p style="text-align: center;"><b><u>L4</u></b></p> <p>Recognise that shadows are formed when the light from a light source is blocked by a solid object</p> <p style="text-align: center;"><b><u>L5</u></b></p> <p>Find patterns in the way that the size of shadows change.</p> <p style="text-align: center;"><b><u>KEY VOCABULARY</u></b></p> <p style="text-align: center;"><b>Light</b></p> <p>Light, Shadows, Mirror, Reflective, Dark, Reflection</p>	<p style="text-align: center;"><b><u>Summer 1</u></b></p> <p style="text-align: center;"><b><u>L1</u></b></p> <p>Recognise that light appears to travel in straight lines</p> <p style="text-align: center;"><b><u>L2</u></b></p> <p>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 style="text-align: center;"><b><u>L3</u></b></p> <p>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 style="text-align: center;"><b><u>L4</u></b></p> <p>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 style="text-align: center;"><b><u>KEY VOCABULARY</u></b></p> <p style="text-align: center;"><b>Light</b></p> <p>Refraction, Reflection, Light, Spectrum, Rainbow, Colour,</p>





Key Area	Year 4	Year 6
<b>Electricity</b>	<p style="text-align: center;"><b><u>Summer 1-2</u></b></p> <p style="text-align: center;"><b><u>E1</u></b> Identify common appliances that run on electricity.</p> <p style="text-align: center;"><b><u>E2</u></b> Construct a simple series circuit, identifying/naming its basic parts, including cell, wire, bulb, switch and buzzer.</p> <p style="text-align: center;"><b><u>E3</u></b> Use their circuits to create simple devices.</p> <p style="text-align: center;"><b><u>E4</u></b> Draw the circuit as a pictorial representation (not necessarily using conventional circuit symbols).</p> <p style="text-align: center;"><b><u>E5</u></b> About precautions for working safely with electricity.</p> <p style="text-align: center;"><b><u>E6</u></b> Identify whether or not a lamp will light in a simple series circuit/</p> <p style="text-align: center;"><b><u>E7</u></b> 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 style="text-align: center;"><b><u>E8</u></b> Recognise some common conductors and insulators, and associate metals with being good conductors.</p> <p style="text-align: center;"><b><u>KEY VOCABULARY</u></b> <b>Electricity</b> Cells, Wires, Bulbs, Switches, Buzzers, Battery, Circuit, Series, Conductors, Insulators.</p>	<p style="text-align: center;"><b><u>Summer 2</u></b></p> <p style="text-align: center;"><b><u>E1</u></b> Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</p> <p style="text-align: center;"><b><u>E2</u></b> 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.</p> <p style="text-align: center;"><b><u>E3</u></b> Use recognised symbols when representing a simple circuit in a diagram.</p> <p style="text-align: center;"><b><u>KEY VOCABULARY</u></b> <b>Electricity</b> Cells, Wires, Bulbs, Switches, Buzzers, Battery, Circuit, Series, Conductors, Insulators, Amps, Volts, Cell</p>



# Year 1

Key  
Area

Seasonal changes

## Summer 2

### SC1

Observe changes across the four seasons

### SC2

Observe and describe weather associated with the seasons and how day length varies.

### KEY VOCABULARY

#### Seasons

Summer, Spring, Autumn, Winter, Sun, Day, Moon, Night, Light, Dark



## Year 3

Key  
Area

Rocks

### Autumn 1

#### R1

Compare and group together different kinds of rocks (including those in the locality) on the basis of appearance and simple physical properties

#### R2

Describe in simple terms how fossils are formed when things that have lived are trapped within rock

#### R3

Recognise that soils are made from rocks and organic matter.

### KEY VOCABULARY

#### **Rocks**

Fossils, Soils, Sandstone, Granite, Marble, Pumice, Crystals, Absorbent



Key Area	Year 4
Sound	<p style="text-align: center;"><b><u>Autumn 2</u></b></p> <p style="text-align: center;"><b><u>S1</u></b></p> <p style="text-align: center;">Identify how sounds are made, associating some of them with something vibrating</p> <p style="text-align: center;"><b><u>S2</u></b></p> <p style="text-align: center;">Recognise that vibrations from sounds travel through a medium to the ear</p> <p style="text-align: center;"><b><u>S3</u></b></p> <p style="text-align: center;">Find patterns between the pitch of a sound and features of the object that produced it</p> <p style="text-align: center;"><b><u>S4</u></b></p> <p style="text-align: center;">Find patterns between the volume of a sound and the strength of the vibrations that produced it</p> <p style="text-align: center;"><b><u>S5</u></b></p> <p style="text-align: center;">Recognise that sounds get fainter as the distance from the sound source increases.</p> <p style="text-align: center;"><b><u>KEY VOCABULARY</u></b></p> <p style="text-align: center;"><b>Sound</b> Volume, Vibration, Wave, Pitch, Tone, Speaker</p>



## Year 5

Key  
Area

Earth and Space

### Autumn 1-2

#### ES1

Describe the movement of the Earth, and other planets, relative to the Sun in the solar system

#### ES2

Describe the movement of the Moon relative to the Earth

#### ES3

Describe the Sun, Earth and Moon as approximately spherical bodies

#### ES4

Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

### KEY VOCABULARY

**Earth and Space** Earth, Sun, Moon, Axis, Rotation, Day, Night, Phases of the Moon, star, constellation



## Year 6

Key  
Area

Evolution and Inheritance

### Spring 2

#### E11

Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago

#### E12

Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents

#### E13

Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

### KEY VOCABULARY

#### **Evolution and Inheritance**

Fossils, Adaptation, Evolution, Characteristics, Reproduction, Genetics



## Key Skills

	Year R	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Key Skills	<ul style="list-style-type: none"><li>• Learn new vocabulary.</li><li>• Ask questions to find out more and to check what has been said to them.</li><li>• Articulate their ideas and thoughts in well-formed sentences.</li><li>• Describe events in some detail.</li><li>• Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen.</li></ul>	<p>Pupils will be taught to use the following practical scientific methods, processes and skills:</p> <ul style="list-style-type: none"><li>• WS1 asking simple questions and recognising that they can be answered in different ways</li><li>• WS2 observing closely, using simple equipment and measurement</li><li>• WS3 performing simple tests</li><li>• WS4 identifying and classifying</li><li>• WS5 using their observations and</li></ul>	<p>WS1 asking simple questions and recognising that they can be answered in different ways</p> <ul style="list-style-type: none"><li>• WS2 observing closely, using simple equipment and measurement</li><li>• WS3 performing simple tests</li><li>• WS4 identifying and classifying</li><li>• WS5 using their observations and ideas to suggest answers to questions</li><li>• WS6 gathering, recording and communicating data and findings to help in</li></ul>	<ul style="list-style-type: none"><li>• WS1 making decisions, asking relevant questions and using different types of scientific enquiries to answer them</li><li>• WS2 setting up simple practical enquiries, comparative and fair tests</li><li>• WS3 making systematic and careful observations using notes and simple tables</li><li>• WS4 taking accurate measurements using standard units, using a range of equipment, including</li></ul>	<ul style="list-style-type: none"><li>• WS1 making decisions, asking relevant questions and using different types of scientific enquiries to answer them</li><li>• WS2 setting up simple practical enquiries, comparative and fair tests</li><li>• WS3 making systematic and careful observations using notes and simple tables</li><li>• WS4 taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</li></ul>	<ul style="list-style-type: none"><li>• WS1 planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</li><li>• WS2 taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li><li>• WS3 recording data and results of increasing complexity using scientific diagrams and labels, classification keys,</li></ul>	<ul style="list-style-type: none"><li>• WS1 planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</li><li>• WS2 taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li><li>• WS3 recording data and results of increasing complexity using scientific diagrams and labels, classification keys,</li></ul>



	<ul style="list-style-type: none"> <li>• Use new vocabulary in different contexts.</li> </ul>	<p>ideas to suggest answers to questions</p> <ul style="list-style-type: none"> <li>• WS6 gathering, recording and communicating data and findings to help in answering questions.</li> <li>• WS7 use scientific language and read and spell age-appropriate scientific vocabulary</li> <li>• WS8 begin to notice patterns and relationships.</li> </ul>	<p>answering questions.</p> <ul style="list-style-type: none"> <li>• WS7 use scientific language and read and spell age-appropriate scientific vocabulary</li> <li>• WS8 begin to notice patterns and relationships.</li> </ul>	<p>thermometers and data loggers</p> <ul style="list-style-type: none"> <li>• WS5 gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</li> <li>• WS6 recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</li> <li>• WS7 reporting on findings from enquiries, using relevant scientific language, including oral and written explanations, displays or presentations of results and conclusions</li> <li>• WS8 using results to draw simple conclusions, make predictions for new values, suggest</li> </ul>	<ul style="list-style-type: none"> <li>• WS5 gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</li> <li>• WS6 recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</li> <li>• WS7 reporting on findings from enquiries, using relevant scientific language, including oral and written explanations, displays or presentations of results and conclusions</li> <li>• WS8 using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</li> </ul>	<p>tables, scatter graphs, bar and line graphs</p> <ul style="list-style-type: none"> <li>• WS4 using test results to make predictions to set up further comparative and fair tests</li> <li>• WS5 reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</li> <li>• WS6 identifying scientific evidence that has been used to support or refute ideas or arguments.</li> <li>• WS7 explore and talk about their ideas; asking their own questions about scientific</li> </ul>	<p>tables, scatter graphs, bar and line graphs</p> <ul style="list-style-type: none"> <li>• WS4 using test results to make predictions to set up further comparative and fair tests</li> <li>• WS5 reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</li> <li>• WS6 identifying scientific evidence that has been used to support or refute ideas or arguments.</li> <li>• WS7 explore and talk about their ideas; asking their own questions about scientific</li> </ul>
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