

KEY STAGE 1

Knowledge, Skills and Understanding breakdown for Working Scientifically

Year 2

Observing Closely	Performing Tests	Identifying and Classifying	Recording findings
<p>Can they use <see, touch, smell, hear or taste> to help them answer questions?</p> <p>Can they use some science words to describe what they have seen and measured?</p> <p>Can they compare several things?</p>	<p>Can they carry out a simple fair test?</p> <p>Can they explain why it might not be fair to compare two things?</p> <p>Can they say whether things happened as they expected?</p> <p>Can they suggest how to find things out?</p> <p>Can they use prompts to find things out?</p>	<p>Can they organise things into groups?</p> <p>Can they find simple patterns (or associations) ?</p> <p>Can they identify animals and plants by a specific criteria, eg, lay eggs or not; have feathers or not?</p>	<p>Can they use (text, diagrams, pictures, charts, tables) to record their observations?</p> <p>Can they measure using < simple equipment> ?</p>

Year 2 (Challenging)

Observing closely	Performing Tests	Identifying and Classifying	Recording findings
<p>Can they suggest ways of finding out through listening, hearing, smelling, touching and tasting?</p>	<p>Can they say whether things happened as they expected and if not why not?</p>	<p>Can they suggest more than one way of grouping animals and plants and explain their reasons?</p>	<p>Can they use information from books and online information to find things out?</p>

Knowledge, Skills and Understanding breakdown for Life Processes and Living Things

Year 2

All living things	Animals, including humans	Plants	Variation and classification
<p>Can they match certain living things to the habitats they are found in?</p> <p>Can they explain the differences between living and non-living things?</p> <p>Can they describe some of the life processes common to plants and animals, including humans?</p> <p>Can they decide whether something is living, dead or non-living?</p> <p>Can they describe how a habitat provides for the basic needs of living things living there?</p> <p>Can they describe a range of different habitats?</p> <p>Can they describe how plants and animals are suited to their</p>	<p>Can they describe what animals need to survive?</p> <p>Can they explain that animals grow and reproduce?</p> <p>Can they explain why animals have offspring?</p> <p>Can they describe the life cycle of some living things? (e.g. egg, chick, chicken)</p> <p>Can they explain the basic needs of animals, including humans?</p> <p>Can they describe why exercise and a balanced diet are important for humans?</p>	<p>Can they describe what plants need to survive?</p> <p>Can they describe how seeds and bulbs grown into plants?</p> <p>Can they describe what a plant needs to grow and stay healthy?</p> <p>Can they explain that plants grow and reproduce?</p>	<p>Can they sort living things into groups and say why sorted them in that way?</p> <p>Can they compare how plants grow in different conditions by making measurements?</p> <p>Can they identify and compare a variety of plants and animals found in different habitats and microhabitats?</p> <p>Can they collect weather data about a local habitat and use it to explain the plants and animals they will find there?</p> <p>Can they explain how animals get their food and draw a simple food chain?</p>

habitat?			
Year 2 (Challenging)			
<i>All living things</i>	<i>Animals, including humans</i>	<i>Plants</i>	<i>Variation and classification</i>
<p>Can they name some characteristics of an animal that help it to live in a particular habitat?</p> <p>Can they describe what animals need to survive and link this to their habitats?</p>	<p>Can they explain that animals reproduce in different ways?</p>	<p>Can they describe what plants need to survive and link it to where they are found?</p> <p>Can they explain that plants grow and reproduce in different ways?</p>	<p>Can they classify living things into groups according to a range of criteria they have been given?</p>

Knowledge, Skills and Understanding breakdown for Materials and their Properties

Year 2

Classifying and grouping materials	Changing materials
<p>Can they distinguish between an object and the material from which it is made?</p> <p>Can they identify and name a range of everyday materials? (wood, plastic, metal, water, rock)</p> <p>Can they describe the simple physical properties of a variety of everyday materials?</p> <p>Can they compare and classify a variety of materials based on their simple physical properties?</p>	<p>Can they explore how the shapes of solid objects can be changed? (squashing, bending, twisting, stretching)</p> <p>Can they find out about people who developed useful new materials? (Dunlop, Mackintosh, MacAdam)</p> <p>Can they identify and compare the uses of a range of everyday materials? (wood, metal, plastic, glass, brick/rock, paper/cardboard)</p> <p>Can they explain how things move on different surfaces?</p>

Year 2 (Challenging)

Classifying and grouping materials	Changing materials
<p>Can they describe the properties of different materials using words like, transparent or opaque, flexible, etc.?</p> <p>Can they sort materials into groups and say why they have sorted them in that way?</p> <p>Can they say which materials are natural and which are man made?</p>	<p>Can they explain how materials are changed by heating and cooling?</p> <p>Can they tell which materials cannot be changed back after being heated, cooled, bent, stretched or twisted?</p> <p>Can they explain how materials are changed by bending, twisting and stretching?</p>

Knowledge, Skills and Understanding breakdown for Physical Processes

Year 2

Electricity (non Statutory)	Sound	Light (non Statutory)
Can they explain how bulbs work in an electrical circuit?	Can they describe different ways of making sound? Can they explain why a sound is louder the closer they are to the source?	Can they compare the brightness and colour of lights? Can they explain what dark is; using words like shadow? Can they explain why their shadow changes during the day?

Year 2 (Challenging)

Electricity	Sound	Light (non Statutory)
Can they make a bulb go on and off? Can they say what happens to the electricity when more batteries are added?	Can they explain what makes a sound louder and softer and higher and lower? Can they explain how the loudness and pitch of sounds can be altered?	Can they explain why lights need to be bright or dimmer according to need? Can they explain how the loudness and pitch of sounds can be altered?