

KS1 SCIENCE CURRICULUM



Year A

AUTUMN: "PEOPLE, PENGUINS & PLATYPUS"	SPRING: "EXCELLENT EXPLORERS"	SUMMER: "PLAYTIME"
ANIMALS (including Humans)	LIVING THINGS & THEIR HABITATS	EVERYDAY MATERIALS
<p>Parts of Animals (K) Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. (K) Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) Name / locate parts of their body including sense organs. Name body parts of other animals using species specific vocabulary (e.g. fin, paw). Describe, compare & contrast two animals. Understand functions of sense organs. Y2 ext: Name & locate increasingly detailed body parts in humans & other animals. Explain functions & recognise consequences if they were not present. Identify unusual scents, textures, tastes, sounds. Use species-specific vocab confidently and accurately.</p>	<p>Living Things (K) Explore and compare the differences between things that are living, dead, and things that have never been alive (K) Notice that animals, including humans, have offspring which grow into adults Understand observable things changes take place when animals get older. Use observations to recognize differences between humans / other animals & animals / plants / non-living things. Group & sort living and non-living things, giving reasons for choices. Y2 ext: Group living / non-living / never alive objects; justified choices according to rules they create. Begin to identify differences between living things based on observable features & behaviours. Recognise all living things follow a life-cycle from birth to death.</p>	<p>Identifying Materials (K) Distinguish between an object and the material from which it is made (K) Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock Identify / name common materials including some liquids & powders. Collect, group & record objects made from same material. Identify some materials are unsuitable for some objects & give reasons. Investigate materials to wrap & protect something through the post. Y2 ext: Name less common materials. Order liquids by ease they can be stirred; record results. Suggest method for investigating protective nature of different materials.</p>
<p>Types of Animals (K) Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals (K) Identify and name a variety of common animals that are carnivores, herbivores and omnivores Recognise different animals live in the local environment & name some. Recognise similarities / differences within & between animals; classify familiar animals. Gather information & present data in tables, carol diagrams & bar charts. Interpret these to answer / generate questions. Y2 ext: Classify animals into key groups & describe / recognise key features. Begin to recognize behaviours of animals in groups, such as how they raise their young. Represent data in more than one form; use to generate and answer questions.</p>	<p>Habitats (K) 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 (K) Identify and name a variety of plants and animals in their habitats, including micro-habitats Recognise different plants & animals live in local environment. Describe / record different species found in different habitats; predict which species live in which habitat. Consider how to treat living things & the environment with care / sensitivity. Recognise hazards to themselves & take action. Y2 ext: Suggest reasons why different plants & animals are found in different environments. Identify features which make living things particularly suited to their environment. Make accurate records and present information in different ways (e.g. map of mini-beasts).</p>	<p>Comparing Materials (K) Describe simple physical properties of a variety of everyday materials (K) Compare and group together a variety of everyday materials on the basis of their simple physical properties. Describe physical properties of everyday materials; make simple comparisons & used to sort. Raise questions about properties of 'slime' and answered by comparative test. Know some materials float & some sink. Know some materials let light through while others do not. Y2 ext: Describe a variety of properties. Take measurements using standard units and record results on a table. Recognise objects made of same material will behave same way in water (e.g. paper will float, absorb water and sink).</p>
WORKING SCIENTIFICALLY	WORKING SCIENTIFICALLY	WORKING SCIENTIFICALLY
<p>(WS) Observing closely, using simple equipment (WS) Identifying and classifying (WS) Gathering and recording data to help in answering questions. (WS) Performing simple tests</p>	<p>(WS) Identifying and classifying (WS) Gathering and recording data to help in answering questions. (WS) Observing closely, using simple equipment (WS) Asking simple questions and recognising that they can be answered in different ways (WS) Using their observations and ideas to suggest answers to questions</p>	<p>(WS) Observing closely, using simple equipment (WS) Identifying and classifying (WS) Performing simple tests (WS) Asking simple questions and recognising that they can be answered in different ways (WS) Using their observations and ideas to suggest answers to questions (WS) Gathering and recording data to help in answering questions.</p>
VOCABULARY	VOCABULARY	VOCABULARY
<p>Fish / amphibian / reptile / bird / mammal / Scales / gills / tail / feathers / wings / eggs / back-bone / tentacles Wild / nature / domesticated / tame / pet Nocturnal / cold-blooded / warm-blooded Carnivore / herbivore / omnivore</p>	<p>Habitat / home / shelter / micro-habitat / Forests / grassland / mountains / desert / coral reef / polar / river / woodland / pond / sea / rainforest / Climate change / deforestation / pollution / Indigenous / native /</p>	<p>Materials / wood / plastic / metal / glass Fabric / leather / wool / cotton / silk Properties / hard / soft / rough / smooth / stiff / bendy / shiny / dull / waterproof</p>

Year B

AUTUMN: "REMEMBER, REMEMBER..."	SPRING: "HERE & THERE"	SUMMER: "BEAUTIFUL BUILDINGS"
ANIMALS (including Humans)	PLANTS	USES of EVERYDAY MATERIALS
<p>Feeding and Exercise (K) Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) (K) Describe how animals obtain their food from plants / animals, using the idea of a simple food chain, and identify / name different sources of food. (K) Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p>Understand basic needs for survival. Understand some animals eat plants, others animals & some eat both. Identify & construct simple food chain. Group / sort foods by origins & explain. Know that eating a variety of food, exercise and personal hygiene are associated with human health.</p> <p>Y2 ext: Recognise deficiencies in health occur when basic needs are not met. Explain how humans can stay healthy, including what is a balanced diet. Recognise living things are dependent on each other for food & that most food chains begin with a green plant.</p>	<p>Plants (K) Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees (K) Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p>Name common plants / trees. Identify main parts of a plant. Compare & contrast different plants. Name & describe examples of deciduous & evergreen trees. Grow bedding plants and describe / record changes.</p> <p>Y2 ext: Locate & name increasingly detailed plant parts in trees & flowering plants. Use species specific vocabulary with confidence & accuracy to name more detailed plant parts (e.g. root hairs, fruits, leaf veins). Identify increasingly unusual or unfamiliar plants.</p>	<p>Uses of materials (K) 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>Identify / name everyday materials. Understand different properties and compare between different materials. Identify suitable / unsuitable materials for different objects and explain why. Sort materials in various ways & explain. Use reference sources to produce a fact sheet. Compare strength of types of paper, making predictions. Chose appropriate way to record results into waterproof materials.</p> <p>Y2 ext: Identified a wider range of materials, including different types of wood & metals. Identify which material is best for an object stating logical reasons. Make predictions & explain thinking. Order test results.</p>
<p>Changing Seasons (K) Observe changes across the four seasons (K) Observe and describe weather associated with the seasons and how day length varies.</p> <p>Name & compare four seasons. Identify similarities / differences. Identify & design weather symbols. Record observations & measurements over time. Identify changes to plants / animals in local environment.</p> <p>Y2 ext: Outline extreme weather conditions found in other countries. Use detail scales / thermometers. Design a way to record wind speed numerically. Research weather patterns from previous years; compare with their measurements.</p>	<p>Growing Plants (K) Observe and describe how seeds and bulbs grow into mature plants (K) Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p>Understand plants need water, light & warmth. Describe changes in plants as they grow. Recognise most plants grow from seeds & some from bulbs. Realise seeds can be found in fruit of plants. Compare seeds & describe differences in size / shape.</p> <p>Y2 ext: Describe effect of lack of light, water or warmth on plant growth. Write general statement about conditions needed for plant growth. Taken & recorded accurate measurements of plant growth; made detailed observations of changes. Recognise when a seed has germinated.</p>	<p>Changing Shape (K) Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>Explain that the shape of some materials can be changed. Compare properties of different materials & classify them according to how shape can be changed. Observe / comment on how 'silly putty' changes over time. Carry out comparative test to find which material is the stretchiest.</p> <p>Y2 ext: Sort materials by ranking them from most to least bendy / squashy. Measure how far silly putty stretches; record results on a bar chart. Suggest how to test the stretchiness of materials.</p>
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VOCABULARY	VOCABULARY	VOCABULARY
<p>Food chain / carnivore / herbivore / omnivore / Resources / competition / survival Nutrients / protein / carbohydrates / fats / food groups / energy / Health / diet / exercise / hygiene / balanced diet Seasons / Autumn / Winter / Spring / Summer / fall / months Weather / temperature / thermometer / weather symbol / Deciduous / coniferous / evergreen</p>	<p>Plant / seed / bulb / stem / crown / canopy / flower / blossom / trunk / bark / branches / Deciduous / coniferous / evergreen / Oak / conifer / horse chestnut / willow / silver birch / beech / Carbon dioxide / oxygen /</p>	<p>Materials / wood / plastic / metal / glass / Fabric / leather / wool / cotton / silk / Properties / hard / soft / rough / smooth / stiff / bendy / shiny / dull / waterproof / tough / strong / flexible / glossy / Man-made / natural / shaped / mould / pour / flow / Liquid / gas / solid / Squash / bend / twist / stretch /</p>