

## Key Stage 1 Cycle A – Autumn 1



### Animals including Humans

#### Knowledge

What are the main classifications of animals? (Fish, amphibians, birds, mammals, reptiles)

What is the difference between herbivores, carnivores, omnivores?

Which animals are vertebrates and which are invertebrates?

Which parts of the human body are responsible for the 5 senses?

What do all animals need to survive? (water, food and air)

#### Skills

I can observe closely using magnifying glasses, clipboards, ipads, post it notes.

I can begin to record findings in a range of simple ways including pictograms and tally using simple scientific language.

I can sort, group and gather data in a variety of ways to help answer questions.

I can use simple features to compare objects, materials and living things.

**Science Enquiry Approaches:** Pattern seeking and Identifying, grouping and Classifying

**Vocabulary:** fish, mammal, amphibian, reptile, bird, omnivore, herbivore, carnivore, names of basic body parts, senses, taste, touch, smell, see, vision, hear, vertebrate, invertebrate, survival, nutrition, exercise

**Famous Scientist:** Steve Irwin

## Key Stage 1 Cycle A – Autumn 2



### Plants and Trees

#### Knowledge

What is the name for trees that lose their leaves in Winter and the name for trees that don't lose their leaves?

What are common, wild and garden plants?

What basic changes happen to trees and plants throughout the year?

What basic things do trees and plants need to survive?

What are the basic structures of common trees and plants? (Trunks, roots, branches. leaves)

#### Skills

I can observe and discuss changes over time.

I can use simple equipment including magnifying glasses, scales and rulers.

I can decide how to sort and classify objects into simple groups.

I can share and ask questions about things I have found with others.

I can ask simple questions about the world and look in non-fiction books and the internet to find answers.

**Science Enquiry Approaches:** Observation over time; Identifying, Grouping and Classifying; Research

**Vocabulary:** Spring, Summer, Autumn, Winter, deciduous, evergreen, wild, garden, common, trunk, branches, leaf, root, bud, blossom, petals, stem, carbon dioxide, oxygen

**Famous Scientist:** Jeanne Baret, George Washington Carver

## Key Stage 1 Cycle A – Spring 1

### Materials - Classification



#### Knowledge

What is the difference between an object and a material?

Are all objects made from the same material?

What are names of the main everyday materials?  
(Wood, plastic, metal, glass, rock)

Where do natural materials come from?

What is the difference between natural and man-made materials?

Why are some materials man-made?

#### Skills

I can use simple features to compare objects and materials.

I can reflect on evidence and findings to suggest answers to questions.

I can talk confidently about what I have seen or found, making links in findings.

I can record data in a variety of ways such as simple sorting diagrams and tables.

**Science Enquiry Approaches:** Comparative testing; Identifying, Grouping and Classifying; Research

**Vocabulary:** materials, wood, metal, glass, plastic, rock, fabric, paper, cardboard, rubber, cork, natural, man-made, chemical, rough, smooth, hard, durable, flexible

**Famous Scientist:** John McAdam, John Dunlop

## Key Stage 1 Cycle A – Spring 2

### Living Things and their Habitats (Exploring Habitats)



#### Knowledge

What is the difference between things that are living, things that are dead and things that have never been alive?

What is a habitat? Are all habitats the same? (Forests, grasslands, mountain slopes, deserts etc)

Why do different animals live in different habitats?  
(Different habitats provide the needs for different animals and plants)

Why are some living things forced to leave their habitats?  
(Forests burnt down, water pollution, ice caps melting)

#### Skills

I can ask a range of scientific questions about how and why things happen.

I can observe changes over time.

I can ask simple questions about the world and look in non-fiction books and the internet to find answers.

I can talk about patterns I notice when observing and begin to make connections, recording my ideas in a range of ways.

**Science Enquiry Approaches:** Research, Problem Solving, Observation over time

**Vocabulary:** living, dead, never living, food chain, food sources, habitat, microhabitat, depend, survive, pollution, woodland, rainforest, urban, coastal, arctic, desert, mountain

**Famous Scientist:** Jane Goodall, Sir David Attenborough

## Key Stage 1 Cycle A – Summer 1



### Plants

#### Knowledge

Where do plants come from? (Explore seeds and bulbs)

Do all plants grow from the same seeds / bulbs?

What are the main features of a plant? Why are they important? (bud, stem, leaf, petal, pollen, root)

What do plants need to survive?

How and why are seeds dispersed?

What factors can affect germination?

#### Skills

I can measure when observing using non-standard and standard units of measure.

I can attempt to plan and carry out simple tests.

I can share and ask questions about things I have found and talk about my findings with confidence.

I can begin to make basic predictions.

I can record and report findings using drawings.

**Science Enquiry Approaches:** Comparative / Fair Testing, Problem Solving

**Vocabulary:** seeds, bulbs, plants, bud, leaf, root, stem, pollen, petal, dispersal, germinate, shoot, nutrition

**Famous Scientist:** Jane Colden

## Key Stage 1 Cycle A – Summer 2



### Materials - Properties

#### Knowledge

Can materials change shape? What can we do to materials to change their shape? (Bend, twist, squash, stretch)

Can any materials change shape temporarily?

Can children identify some materials that cannot change shape at all?

Why are some materials good for certain uses? (E.g. glass is suitable for windows, metal for knives and forks, fabric for clothes)

Can different materials be used for the same product? eg bags – paper, fabric, plastic.

Why are some objects made from more than one material?  
Eg cars made from metal, glass and plastic

#### Skills

I can develop and recognise ways to answer scientific questions.

I can carry out practical testing opportunities.

I can talk about the aim of practical tests I am working on.

I can reflect on findings and evidence to suggest answers to questions on a basic level.

I can record data in a variety of ways such as tally charts and using simple tables.

**Science Enquiry Approaches:** Comparative / Fair Testing, Pattern Seeking, Problem Solving

**Vocabulary:** Names of different materials, natural, man-made, chemical, rough, smooth, hard, durable, flexible, bendy, rigid, solid, hollow, opaque, transparent, waterproof, permanent, temporary

**Famous Scientist:** Charles Macintosh