



## Science progression for Year 1 and 2 at Cusgarne

Green-All Red-Year 1 Blue-Year 2

Subject Lead: Tim Barnard

**National Curriculum objectives:** In this unit, children will be taught to:

### **KS1 Working Scientifically**

Pupils will be taught to use the following practical scientific methods, processes and skills:

**WS1 asking simple questions and recognising that they can be answered in different ways**

Ask questions about how and why things change  
Ask questions about how and why things are similar or different  
Ask questions about how things are and the way they work  
Ask questions to find out what people do and how things work  
Ask questions about why and how things are linked

**WS2 observing closely, using simple equipment and measurement**

With help identify changes to observe and measure and suggest how to do it  
Identify simple changes and talk about them  
Make comparisons between simple features of objects, materials or living things  
Use non-standard units and simple equipment to record changes  
Sequence the changes

**WS3 performing simple tests**

With help notice links between cause and effect  
With help identify simple variables to change and

### **Plants YR1**

- identify and name a variety of common wild and garden plants, including deciduous and evergreen trees in the local environment and other biomes
- identify and describe the basic structure of a variety of common flowering plants, including trees.

### **Plants YR2**

- observe and describe how seeds and bulbs grow into mature plants
- find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

### **Animals, including Humans YR1**

- identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals and invertebrates
- identify and name a variety of common animals that are carnivores, herbivores and omnivores and understand how teeth can be used to recognise these animals
- describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets and invertebrates)
- identify, name, draw and label the basic parts of the human body (eyes, ears, mouth, nose, skin, ankle, elbow, wrist, hip, waist,) and say which part of the body is associated with each sense.

### **Animals including Humans YR2**

- notice that animals, including humans, have offspring which grow into adults including lifecycles for tadpoles, caterpillars etc
- find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
- describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

### **Everyday Materials YR1**

- distinguish between an object and the material from which it is made including manmade or natural
- identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
- describe the simple physical properties of a variety of everyday materials
- compare and group together a variety of everyday materials on the basis of their simple physical properties.

### **Uses of Everyday Materials YR2**

measure

Identify similarities and differences and talk about them

Use non-standard units and simple equipment to record data

Suggest ways in which a test can be carried out

Suggest ways in which to record tests

Understand why a test should be fair

#### **WS4 identifying and classifying**

Decide what to observe to identify or sort things

Sort objects by observable and behavioural features

**WS5 using their observations and ideas to suggest answers to questions**

Use my records to help sort or identify other things

Talk about whether the information source was useful

**WS6 gathering, recording and communicating data and findings to help in answering questions.**

With help make suggestions about how to find things out

Use simple books and electronic media to find things out

Begin to use scientific language to talk about what you have found out

Record my sorting in sorting circles or tables

Record in words and pictures what you find out

Record observations in words or pictures or simple tables

Record in words or pictures or in simple prepared formats such as tables and / or charts

Record in words or pictures or in simple prepared formats such as tables, tally charts and maps

- identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

#### **Seasonal Changes YR1**

- observe changes across the four seasons and relate to our local environment and other countries of the world
- observe and describe weather associated with the seasons and how day length varies and relate to our local environment and other countries of the world
- recognise the difference between weather and climate

#### **Living Things and their Habitats YR2**

- explore and compare the differences between things that are living, dead, and things that have never been alive and relate to manmade or natural
- identify that most living things live in habitats to which they are suited
- describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
- identify and name a variety of plants and animals in their habitats, including micro-habitats
- describe how animals obtain their food from plants and other animals
- understand a simple food chain, and identify and name different sources of food.

**WS7 use scientific language and read and spell age-appropriate scientific vocabulary**

Begin to use scientific language to talk about how things are similar or different

Use vocabulary related to the topic

**WS8 notice patterns and relationships.**

With help decide what patterns to observe and measure and suggest how to do it.

Identify simple patterns and talk about them

Make links between two sets of observations

Use non-standard units and simple equipment to record events that might be related

Begin to use scientific language to talk about patterns

Talk about whether the pattern was as expected