

## Science progression for Year 1 and 2 at Probus Primary School

#### Green-All Red- Year 1 Blue-Year 2

#### 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

sk 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

dentify 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 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

#### Plants FS

• Make observations of plants and talk about changes

#### Plants YR1

- P1 identify and name a variety of common wild and garden plants, including deciduous and evergreen trees in the local environment and other biomes
- P2 identify and describe the basic structure of a variety of common flowering plants, including trees.

#### Plants YR2

- P1 observe and describe how seeds and bulbs grow into mature plants
- P2 find out and describe how plants need water, light and a suitable temperature to arow and stay healthy.

## Animals, including Humans FS

• Make observations of animals and talk about changes

### Animals, including Humans YR1

- AH1 identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals and invertebrates
- AH2 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
- AH3 describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets and invertebrates)
- AH4 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**

- AH1 notice that animals, including humans, have offspring which grow into adults including lifecycles for tadpoles, caterpillars etc
- AH2 find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
- AH3 describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

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 auestions

lse my records to help sort or identify other things alk 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

## WS7 use scientific language and read and spell ageappropriate scientific vocabulary

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

Use vocabulary related to the topic

### WS8 begin to 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

#### **Everyday Materials FS**

Talk about the similarities and differences in relation to materials

#### **Everyday Materials YR1**

- EM1 distinguish between an object and the material from which it is made including manmade or natural
- EM2 identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
- EM3 describe the simple physical properties of a variety of everyday materials
- EM4 compare and group together a variety of everyday materials on the basis of their simple physical properties.

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

- EM1 identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- EM2 find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

#### Seasonal Changes FS

• Talk about the features of their own environment and how environments vary from one another

#### **Seasonal Changes YR1**

- SC1 observe changes across the four seasons and relate to our local environment and other countries of the world
- SC2 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
- SC3 recognise the difference between weather and climate

## Living things and their Habitats FS

• Know about the similarities and differences in relation to living things

#### Living Things and their Habitats YR2

- LH1 explore and compare the differences between things that are living, dead, and things that have never been alive and relate to manmade or natural
- LH2 identify that most living things live in habitats to which they are suited
- LH3 describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
- LH4 identify and name a variety of plants and animals in their habitats, including microhabitats
- LH5 describe how animals obtain their food from plants and other animals
- LH6 understand a simple food chain, and identify and name different sources of food.