

## **Henleaze Junior School**

# Assessment Framework Non-negotiable expectations

### Science

## By the end of Year 4 children should be able to

#### Living Things

Recognise that living things can be grouped in a variety of ways

Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment

Recognise that environments can change and that this can sometimes pose dangers to living things

#### **Animals**

Describe the simple functions of the basic parts of the digestive system in humans

Identify the different types of teeth in humans and their simple functions

Construct and interpret a variety of food chains, identifying producers, predators and prey

#### States of Matter

Compare and group materials together, according to whether they are solids, liquids or gases

Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)

Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature

#### Sound

Identify how sounds are made, associating some of them with something vibrating

Recognise that vibrations from sounds travel through a medium to the ear

Find patterns between the pitch of a sound and features of the object that produced it

Find patterns between the volume of a sound and the strength of the vibrations that produced it

Recognise that sounds get fainter as the distance from the sound source increases

#### **Electricity**

Identify common appliances that run on electricity

Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers

Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery

Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit

Recognise some common conductors and insulators, and associate metals with being good conductors

#### **Working Scientifically**

Ask relevant guestions and use different types of scientific enquiries to answer them

Sett up simple practical enquiries, comparative and fair tests

Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers, clocks and rulers

Gather, record, classify and present data in a variety of ways to help in answering questions

Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables

Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions

Make predictions and use results to draw simple conclusions, suggest improvements and raise further questions

Identify differences, similarities or changes related to simple scientific ideas and processes

Use straightforward scientific evidence to answer questions or to support their findings