Information for Parents/Carers

SCIENCE - A YEAR 4 SCIENTIST

Working scientifically

(Y3 and Y4)

I can ask relevant scientific questions.

I can use observations and knowledge to answer scientific questions.

I can set up a simple enquiry to explore a scientific question.

I can set up a test to compare two things.

I can set up a fair test and explain why it is fair.

I can make careful and accurate observations, including the use of standard units.

I can use equipment, including thermometers and data loggers to make measurements.

I can gather, record, classify and present data in different ways to answer scientific questions.

I can use diagrams, keys, bar charts and tables; using scientific language.

I can use findings to report in different ways, including oral and written explanations, presentation.

I can draw conclusions and suggest improvements.

I an make a prediction with a reason.

I can identify differences, similarities and changes related to an enquiry.

Biology

<u>Living things and their habitats</u>

I can group living things in different ways.

I can use classification keys to group, identify and name living things.

I can create classification keys to group, identify and name living things (for others to use).

I can describe how changes to an environment could endanger living things.

<u>Animals, including humans</u>

I can identify and name the parts of the human digestive system.

I can describe the functions of the organs in the human digestive system.

I can identify and describe the different types of teeth in humans.

I can describe the functions of different human teeth.

I can use food chains to identify producers, predators and prey.

I can construct food chains to identify producers, predators and prey.

Chemistry

<u>States of matter</u>

I can group materials based on their state of matter (solid, liquid, gas).

I can describe how some materials can change state.

I can explore how materials change state.

I can measure the temperature at which materials change state.

I can describe the water cycle.

I can explain the part played by evaporation and condensation in the water cycle.

Physics

Sound

I can describe how sound is made.

I can explain how sound travels from a source to our ears.

I can explain the place of vibration in hearing.

I can explore the correlation between pitch and the object producing a sound.

I can explore the correlation between the volume of a sound and the strength of the vibrations that produced it.

I can describe what happens to a sound as it travels away from its source.

Electricity

I can identify and name appliances that require electricity to function.

I can construct a series circuit.

I can identify and name the components in a series circuit (including cells, wires, bulbs, switches and buzzers).

I can draw a circuit diagram.

I can predict and test whether a lamp will light within a circuit.

I can describe the function of a switch in a circuit.

I can describe the difference between a conductor and insulators; giving examples of each.

Exceeding Year 4 Expectations

I can plan and carry out a scientific enquiry by controlling variables fairly and accurately.

I can use test results to make further predictions and set up further comparative tests.

I can record more complex data and results using scientific diagrams, classification keys, tables, bar charts, line graphs and models.

I can report findings from scientific enquiries through written explanations and conclusions.

I can explain how people, weather and the environment can affect living things.

I can group and classify a variety of materials according to the impact of temperature upon them.

I can relate temperature to the change of state of materials.

I can work out which metals can be used to connect across a gap in a circuit.