

Information for Parents/Carers

SCIENCE - A YEAR 5 SCIENTIST

Working scientifically

(Y5 and Y6)

I can plan different types of scientific enquiry.

I can control variables in an enquiry.

I can measure accurately and precisely using a range of equipment.

I can record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.

I can use the outcome of test results to make predictions and set up a further comparative fair test.

I can report findings from enquiries in a range of ways.

I can explain a conclusion from an enquiry.

I can explain causal relationships in an enquiry.

I can relate the outcome from an enquiry to scientific knowledge in order to state whether evidence supports or refutes an argument or theory.

I can read, spell and pronounce scientific vocabulary accurately.

Biology

Living things and their habitats

I can describe the life cycle of different living things, e.g. mammal, amphibian, insect bird.

I can describe the differences between different life cycles.

I can describe the process of reproduction in plants.

I can describe the process of reproduction in animals.

Animals, including humans

I can create a timeline to indicate stages of growth in humans.

Chemistry

Properties and changes of materials

I can compare and group materials based on their properties (e.g. hardness, solubility, transparency, conductivity, [electrical & thermal], and response to magnets).

I can describe how a material dissolves to form a solution; explaining the process of dissolving.

I can describe and show how to recover a substance from a solution.

I can describe how some materials can be separated.

I can demonstrate how materials can be separated (e.g. through filtering, sieving and evaporating).

I know and can demonstrate that some changes are reversible and some are not.

I can explain how some changes result in the formation of a new material and that this is usually irreversible.

I can discuss reversible and irreversible changes.

I can give evidenced reasons why materials should be used for specific purposes.

Physics

Earth and space

I can describe and explain the movement of the Earth and other planets relative to the Sun.

I can describe and explain the movement of the Moon relative to the Earth.

I can explain and demonstrate how night and day are created.

I can describe the Sun, Earth and Moon (using the term spherical).

Forces

I can explain what gravity is and its impact on our lives.

I can identify and explain the effect of air resistance.

I can identify and explain the effect of water resistance.

I can identify and explain the effect of friction.

I can explain how levers, pulleys and gears allow a smaller force to have a greater effect.

Exceeding Year 5 Expectations

I can explore different ways to test an idea, choose the best way and give reasons.

I can vary one factor whilst keeping the others the same in an experiment.

I can use information to help make a prediction.

I can explain (in simple terms) a scientific idea and what evidence supports it.

I can create a timeline to indicate the stages of growth in certain animals, such as frogs and butterflies.

I can observe my local environment and draw conclusions about life-cycles, for example, the vegetable garden or plants in a shrubbery.

I can describe methods for separating mixtures, for example, filtration, distillation.

I can compare the time of day at different places on Earth.

I can describe and explain how motion is affected by forces, for example, gravitational attractions, magnetic attraction and friction.

I can work out how water can cause resistance to floating objects.