

Information for Parents/Carers

SCIENCE TARGETS - A YEAR 6 SCIENTIST

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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 classify living things into broad groups according to observable characteristics and based on similarities & differences.

I can describe how living things have been classified.

I can give reasons for classifying plants and animals in a specific way.

Animals, including humans

I can identify and name the main parts of the human circulatory system.

I can describe the function of the heart, blood vessels and blood.

I can discuss the impact of diet, exercise, drugs and life style on health.

I can describe the ways in which nutrients and water are transported in animals, including humans.

Evolution and inheritance

I can describe how the earth and living things have changed over time.

I can explain how fossils can be used to find out about the past.

I can explain about reproduction and offspring (recognising that offspring normally vary and are not identical to their parents).

I can explain how animals and plants are adapted to suit their environment.

I can link adaptation over time to evolution.

I can explain evolution.

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Physics

Physics

Light

I can explain how light travels.

I can explain and demonstrate how we see objects.

I can explain why shadows have the same shape as the object that casts them.

I can explain how simple optical instruments work, e.g. periscope, telescope, binoculars, mirror, magnifying glass etc.

Electricity

I can explain how the number and voltage of cells in a circuit links to the brightness of a lamp or the volume of a buzzer.

I can compare and give reasons for why components work and do not work in a circuit.

I can draw circuit diagrams using the correct symbols.

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Science Targets

Exceeding Year 6 Expectations

I can use information from different sources to answer a question and plan a scientific enquiry.

I can make a prediction that links with other scientific knowledge.

I can plan in advance which equipment I will need and use it appropriately.

I can link my conclusions to other scientific knowledge.

I can explain how some living things adapt to survive in extreme conditions.

I can analyse the advantages and disadvantages of specific adaptations, such as being on two rather than four feet.

I am beginning to understand about the nature of DNA.

I can readily group animals into reptiles, fish, amphibians, birds and mammals.

I can make a diagram of the human body and explain how different parts work and depend on one another.

I can compare the organ systems of humans to those of other animals.

I can use the ray model to explain the size of shadows.

I can explain the danger of short circuits and what a fuse is.