



Living Things & Their Habitats - I can:

- describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals
- give reasons for classifying plants and animals based on specific characteristics.

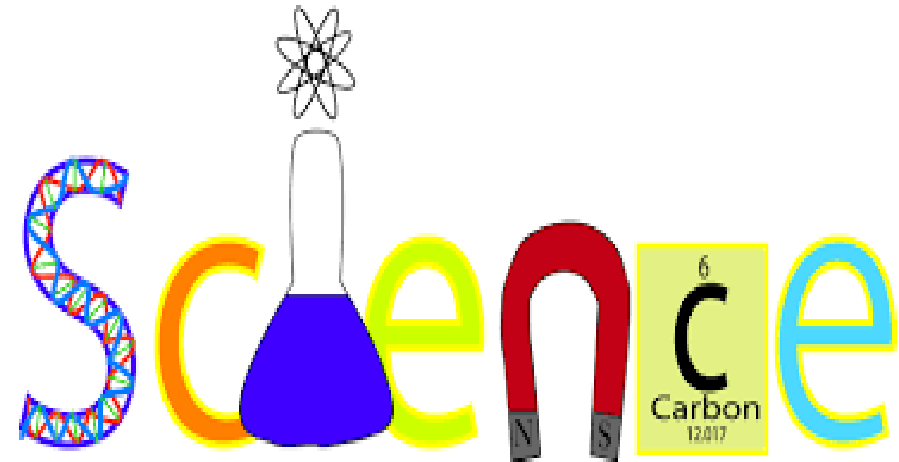
Animals (including humans) - I can:

- identify and name the main parts of the human circulatory system and describe the functions of the heart, blood vessels and blood
- recognise the impact of diet, exercise, drugs and lifestyle on the way our bodies function
- describe the ways in which nutrients and water are transported within animals, including humans
- explain human reproduction

How to support science discovery and learning at home:

- be brave and let them loose in the kitchen – making mixtures from the contents of the cupboard is a brilliant way to spend a wet afternoon <http://www.science-sparks.com/2013/04/27/kitchen-science-round-up>
- cook together – being able to plan and cook a balanced meal is a vital life skill and often much more enjoyable when the children get involved <http://www.bbcgoodfood.com/recipes/category/family-kids>
- get out and about hunting for mini-beasts - building houses for the caterpillars and ladders for spiders is loads of fun <http://www.woodlandtrust.org.uk/naturedetectives>
- find a patch of soil in the garden and plant your own veg – it's rewarding, it's cost effective and it's tasty <http://naturallysavvy.com/live/10-fruits-and-vegetables-to-plant-with-your-kids>
- if you get the chance visit museums and exhibitions – the majority are free and often have special events on during school holidays

<https://www.dayoutwiththekids.co.uk/things-to-do/yorkshire/west-yorkshire/leeds/sightseeing/museums-art-galleries>



Year 6

The national curriculum for science aims to ensure that all pupils:

develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics. Develop an understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them are equipped with the scientific knowledge required to understand the uses and implications of science today and for the future.

DfE Science Curriculum 2014

At Meltham Moor we aim to deliver the science curriculum through as many practical, hands on lessons as possible. Lots of key English and maths skills are needed to complete the work and large elements of geography and history are taught alongside the science.

The children are expected to use key scientific vocabulary accurately and precisely. It can be tricky to understand this specialist vocabulary. It is important that the children build up this extended vocabulary in order for them to access the KS3 & 4 science curriculum. By encouraging your child to use key words and discussing their meaning it will really help them to develop their understanding and enjoyment of science as well as setting down solid foundation stones for later progression.

Set out below are the topics and statements of expectation for Year 6. Although split over the year the topics are not taught discretely and we aim to include as many cross-curricular links as possible. Working scientifically specifies the understanding of the nature, processes and methods of science for each year group. This is not taught as a separate strand but woven throughout each topic.



Working Scientifically (Upper Key Stage Two) - I can:

- plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- record data and results of increasing complexity

using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

- use test results to make predictions to set up further comparative and fair tests

- report and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- identify scientific evidence that has been used to support or refute ideas or arguments



Electricity - I can:

- associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
- compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches
- use recognised symbols when representing a simple circuit in a diagram

Light - I can:

- recognise that light appears to travel in straight lines
- use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye
- explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
- use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.

Evolution & Inheritance - I can

- recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
- recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
- identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

