## Animals (including humans) – I can:

• identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat

• identify that humans and some other animals have skeletons and muscles for support, protection and movement

## Living Things & Their Habitats - Plants

• identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers

• explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant

• investigate the way in which water is transported within plants

• explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal

## 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 <u>http://www.science-</u> <u>sparks.com/2013/04/27/kitchen-science-</u> 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 <u>http://www.bbcgoodfood.com/recipes/category/family-kids</u>

• get out and about hunting for mini-beasts - building houses for the caterpillars and ladders for spiders can be loads of fun

#### http://www.woodlandtrust.org.uk/naturedetectives

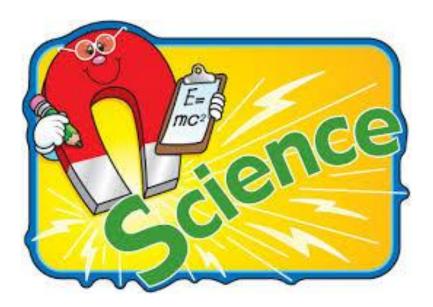
• find a patch of soil in the garden and plant your own veg – it's rewarding, it's cost effective and it's tasty <u>http://naturallysavvy.com/live/10-fruits-and-vegetables-to-plant-with-your-kids</u>

• 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 3



# 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 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 'I can' statements for Year 3. Although split over the year the topics are not taught discretely and we aim to include as many crosscurricular links as possible. Working scientifically specifies the understanding of the nature, processes and methods of science for each year group. It is not taught as a separate strand but woven throughout each topic.

## Working Scientifically (Lower Key Stage Two) – I can:

- ask relevant questions and using different types of scientific enquiries to answer them
- set up simple practical enquiries, comparative and fair tests

• make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers

• 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

### Rocks & Fossils - I can:

- compare and group together different kinds of rocks on the basis of their appearance and simple physical properties
- describe in simple terms how fossils are formed when things that have lived are trapped within rock
- recognise that soils are made from rocks and organic matter

## *Light* – I can:

- recognise that they need light in order to see things/ dark is the absence of light
- notice that light is reflected from surfaces
- recognise that light from the sun can be dangerous and how to protect their eyes
- recognise that shadows are formed when the light from a light source is blocked by a solid object
- find patterns in the way that the size of shadows change

## Forces & Magnets – I can:

- compare how things move on different surfaces
- notice that some forces need contact between two objects, but magnetic forces can act at a distance
- observe how magnets attract or repel each other
- compare & group together a variety of materials on the basis of whether they are attracted to a magnet & identify some magnetic materials
- describe magnets as having two poles

