Science Progression of skills Year 3

National Curriculum objectives: In this unit, children will be taught to:

Lower KS2 Working Scientifically Pupils will be taught to use the following practical scientific methods, processes and skills:

- WS1 making decisions, asking relevant questions and using different types of scientific enquiries to answer them
- WS2 setting up simple practical enquiries, comparative and fair tests
- WS3 making systematic and careful observations using notes and simple tables
- WS4 taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- WS5 gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- WS6 recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- WS7 reporting on findings from enquiries, using relevant scientific language, including oral and written explanations, displays or presentations of results and conclusions
- WS8 using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- WS9 identifying differences, patterns, similarities or changes related to simple scientific ideas and processes
- WS10 using straightforward scientific evidence to answer questions or to support their findings.
- WS11 begin to look for naturally occurring patterns and relationships
- WS12 recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations.

Plants

- P1 identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
- P2 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
- P3 investigate the way in which water is transported within plants
- P4 explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.
- P5 know that plants make their own food

Animals including Humans

- AH1 identify that animals, including humans, need the right types and amount of nutrition, and that they AH2 cannot make their own food; they get nutrition from what they eat
- AH3 identify that humans and some animals have skeletons and muscles for support, protection and movement.

Rocks

- R1 compare and group together different kinds of rocks (including those in the locality) on the basis of appearance and simple physical properties
- R2 describe in simple terms how fossils are formed when things that have lived are trapped within rock
- \bullet R3 recognise that soils are made from rocks and organic matter.

Light

- L1 recognise that they need light in order to see things and that dark is the absence of light
- L2 notice that light is reflected from surfaces
- L3 recognise that light from the sun can be dangerous and that there are ways to protect their eyes

- L4 recognise that shadows are formed when the light from a light source is blocked by a solid object
- L5 find patterns in the way that the size of shadows change.

Forces and Magnets

- FM1 compare how things move on different surfaces
- FM2 notice that some forces need contact between two objects, but magnetic forces can act at a distance
- FM3 observe how magnets attract or repel each other and attract some materials and not others
- FM4 compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials
- FM5 describe magnets as having two poles
- FM6 predict whether two magnets will attract or repel each other, depending on which poles are facing