



### **Working scientifically**

The pupil can, using appropriate scientific language from the national curriculum:

- describe and evaluate their own and others' scientific ideas related to topics in the national curriculum (including ideas that have changed over time), using evidence from a range of sources
- ask their own questions about the scientific phenomena that they are studying, and select the most appropriate ways to answer these questions, recognising and controlling variables where necessary (i.e. observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests, and finding things out using a wide range of secondary sources)
- use a range of scientific equipment to take accurate and precise measurements or readings, with repeat readings where appropriate
- record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- draw conclusions, explain and evaluate their methods and findings, communicating these in a variety of ways
- raise further questions that could be investigated, based on their data and observations.

### **Science Content**

- name, locate and describe the functions of the main parts of plants, including those involved in transporting water and nutrients.
- describe the requirements of plants for life and growth
- name and describe the functions of the main parts of the musculoskeletal system
- describe how living things have changed and evolved over time including the formation of fossils
- group and identify materials including rocks in different ways according to their properties based on first hand observations
- use the idea that light from light sources, or reflected light, travels in straight lines and enters our eyes and how we see the formation and size of shadows.
- describe the effects of simple forces that involve contact that act at a distance (magnetic forces, including those between like and unlike magnetic poles)