



# Year 5 National Expectation

I can, with prompting, identify and manage variables, e.g. when exploring falling paper cones.

I can, with support, answer questions using evidence gathered from different types of scientific enquiry, e.g. comparing life cycles of different plants using change over time, surveys and secondary research.

## Working Scientifically Planning

I can use a line graph to record basic data, e.g. length and mass of a baby as it grows.

I can, with prompting, use various ways to record complex evidence, e.g. when investigating how gears and levers enable a small force to have a larger effect.

I can start to use labelled diagrams to show more complex outcomes, e.g. comparing the time of day at different places on the earth.

I can know how to process repeat readings, e.g. when timing falling objects.

I can take measurements that are precise as well as accurate, e.g. measuring the force needed to pull different shapes of boat through the water.

I can, following discussion of alternatives, select appropriate equipment, e.g. using a shadow stick and measuring length and angle of shadow.

## Working Scientifically Recording evidence

I can suggest further relevant comparative or fair tests, e.g. when testing materials for various properties to determine their suitability for an application.

I can show how evidence supports a conclusion, e.g. researching gestation periods of various mammals and relating them to adult mass.

I can, with support, indicate why some results may not be entirely trustworthy, e.g. when timing falling objects.

I can, with support, display and present key findings from enquiries orally and in writing, e.g. suggesting reasons for similarities and differences between various animals.

I can, with prompting, write a conclusion using evidence and identifying causal links, e.g. investigating what makes a parachute fall quicker.

## Working Scientifically Findings and Conclusions

I can describe in sequence the stages of reproduction in some plants and animals, e.g. dog and a thistle.

I can describe the changes as humans develop to old age, e.g. trends in changes to size, weight, mobility etc.

I can identify similarities and differences in two different life cycles, e.g. sparrow and butterfly, with reference to eggs and intermediate stages.

## Biology

I can use evidence to justify the selection of a material for a purpose.

I can identify reactants and products of chemical changes and recognise these as being irreversible.

I can show how the original materials can be retrieved from each of these changes.

I can justify separation techniques proposed, with reference to materials being separated.

I can describe how some materials, e.g. sugar, will dissolve and can be retrieved.

I can test and sort a range of materials based on their physical properties.

## Chemistry

I can use a diagram or model to explain why the Sun seems to travel across the sky, and what causes day and night.

I can describe the Sun, Earth & Moon as spheres.

I can draw a diagram or use a model to describe the Moon's orbit around the Earth.

I can draw a diagram or use a model to describe planetary orbits.

I can describe how some devices may turn a smaller force into a larger one.

I can describe how motion may be resisted by air resistance, water resistance or friction.

I can explain that gravity causes objects to fall towards Earth.

## Physics