



Year 4 National Expectation

I can set up comparative and fair tests, e.g. finding patterns in the sounds made by elastic bands of different thicknesses.

I can plan investigations using different types of scientific enquiry, e.g. exploring various materials by observing change over time, running comparative tests and conducting surveys.

I can develop relevant, testable questions, e.g. based on observations of animals.

Working Scientifically Planning

I can use various ways to record, group and display evidence, e.g. grouping and classifying various materials.

I can use various ways to record evidence, e.g. comparing the teeth of herbivores and carnivores.

I can use words and diagrams to record findings, e.g. how habitats change during the year.

I can recognise the importance of using standard units and measures accurately, e.g. measuring temperature when investigating its effect on washing drying.

I can use various equipment, as instructed, repeatedly and with care, e.g. thermometers.

Working Scientifically Recording evidence

I can use evidence to suggest further relevant investigations, e.g. making own instruments, using ideas about pitch and volume.

I can use evidence to produce a simple conclusion, e.g. the effect of temperature on various substances.

I can recognise patterns that relate to scientific ideas, e.g. finding out which materials make better earmuffs.

I can present findings either in writing or orally, e.g. relating to investigating which materials are conductors.

I can write a conclusion based on evidence, e.g. effect on brightness of bulbs if more cells are added.

Working Scientifically Findings and Conclusions

I can use a food chain to represent predator-prey relationships.

I can describe the function of each type of tooth in the human skull.

I can identify what each of the principal organs in the digestive system do.

I can describe examples of living things that are threatened by changes to environments, e.g. owls and habitat loss.

I can use classification keys to group and identify members from a range of familiar and less familiar living things.

I can suggest different ways of sorting the same group of living things, e.g. grouping birds according to where they live, what they eat and size of adults.

Biology

I can identify changes of state and research values of degrees Celsius at which changes happen.

I can describe how evaporation and condensation happen in the water cycle, and how temperature affects evaporation.

I can group materials according to their state of matter.

Chemistry

I can predict how the operation of a switch will affect bulbs lighting.

I can predict whether a particular arrangement of components will result in a bulb lighting.

I can sort materials into conductors and insulators, identifying metals as conductors.

I can construct a simple circuit and name its components.

I can list examples of appliances that run on electricity.

I can explain with reference to a particular object how the volume of the sound can be changed.

I can explain with reference to a particular object how the pitch of the sound can be changed.

I can describe the effect of moving further from the source of a sound.

I can describe the role of a medium in the transmission of sound.

I can explain, with reference to vibrations, how an object makes a sound.

Physics