

Year 4 Science Steps – Tracking ladder

Working Scientifically	
I can ask relevant questions and use different types of scientific enquiries to answer them.	
I can set up simple practical enquiries, comparative and fair tests.	
I can make systematic and careful observations and take accurate measurements using standard units using a range of equipment, including thermometers and data loggers.	
I can gather, record, classify and present data in a variety of ways to help in answering questions.	
I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.	
I can report on findings from enquiries, including spoken and written explanations, displays or presentations of results and conclusions.	
I can use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.	
I can identify differences, similarities or changes related to scientific ideas and processes.	
I can use scientific evidence to answer questions or to support my findings.	
Animals, including humans	
I can describe and explain a variety of food chains, naming producers, predators and prey.	
I can explain why humans and some other animals have skeletons and muscles.	
Electricity	
I can talk about common appliances that run on electricity	
I can construct and draw with labels a simple series electrical circuit which includes cells, wires, bulbs, switches and buzzers.	
I can predict if a lamp will light or not in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.	
I can explain that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.	
I can show that some materials are conductors and some are insulators, and can explain that metals are good conductors.	

Living things and their habitats	
I can show that living things can be grouped together in various ways.	
I can explore and use classification keys to help group, identify and name a variety of living things	
I can explain that environments can change and that this sometimes means that living things are put in danger	
Sound	
I can explain how sounds are made, and show that some of them are linked to vibrations.	
I can explain that vibrations from sounds travel through a medium to the ear.	
I can find patterns between the pitch of a sound and features of the object that produced it.	
I can show that sounds get fainter as the distance from the sound source increases.	

States of matter	
I can group materials together, according to whether they are solids, liquids or gases including tricky ones like gels, foams, mists and pastes	
I can demonstrate and explain that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)	
I can correctly talk about the part played by evaporation and condensation in the water cycle and can show a link between the rate of evaporation and temperature	