



Paganel Primary School Curriculum Planning – science

Year 4

Topics:

- Living things and their habitats
- Animals including humans
- States of matter
- Sound
- Electricity

National Curriculum Skills and Knowledge:

Science	Knowledge and Understanding	Autumn	Spring	Summer	Skills	Autumn	Spring	Summer
Living things and their habitats	recognise that living things can be grouped in a variety of ways				asking relevant questions and using different types of scientific enquiries to answer them			
	explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment				setting up simple practical enquiries, comparative and fair tests			
	recognise that environments can change and that this can sometimes pose dangers to living things				making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers			
	recognise that living things can be grouped in a variety of ways				gathering, recording, classifying and presenting data in a variety of ways to help in answering questions			
Animals including humans	describe the simple functions of the basic parts of the digestive system in humans				recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables			
	identify the different types of teeth in humans and their simple functions				reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions			
	construct and interpret a variety of food chains, identifying producers, predators and prey				using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions			
States of Matter	compare and group materials together, according to whether they are solids, liquids or gases				identifying differences, similarities or changes related to simple scientific ideas and processes			
	observe 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)				using straightforward scientific evidence to answer questions or to support their findings.			
	identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature							
Sound	identify how sounds are made, associating some of them with something vibrating							
	recognise that vibrations from sounds travel through a medium to the ear							
	find patterns between the pitch of a sound and features of the object that produced it							
	find patterns between the volume of a sound and the strength of the vibrations that produced it							

Electricity	recognise that sounds get fainter as the distance from the sound source increases				
	identify common appliances that run on electricity				
	construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers				
	identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery				
	recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit				
	recognise some common conductors and insulators, and associate metals with being good conductors				