SCIENCE - Progression of skills & knowledge

Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Living things, plants, animals and humans	Explore and talk about the natural world; notice similarities and differences; care for growing plants and animals.	Name common plants and animals; describe basic plant structures and animal groups; identify human body parts and senses; observe seasonal change.	Observe plant growth and needs; describe offspring, survival needs and healthy living; identify habitats and simple food chains.	Explain functions and requirements of flowering plants; investigate water transport and life cycles; explain nutrition and the role of skeletons and muscles.	Explain digestion and teeth; construct food chains; group living things using classification keys; recognise that environments can change.	Describe human development, life cycles and reproduction in plants and animals.	Explain circulation and transport in humans; classify organisms; explain adaptation and evolution using fossils and variation as evidence.
Materials	Explore familiar materials; use simple words such as rough, smooth and hard; explore floating and sinking and changes to objects.	Name everyday materials; describe, compare and group them by simple physical properties.	Identify and compare uses of everyday materials; explore changes of shape by squashing, bending, twisting and stretching.	Compare and group rocks; explain simply how fossils form; recognise that soils are made from rocks and organic matter.	Group materials as solids, liquids or gases; investigate changes of state, temperature, evaporation and condensation.	Compare material properties; investigate dissolving and separation; distinguish reversible and irreversible changes and justify uses from evidence.	Consolidate and apply prior materials knowledge through increasingly independent scientific enquiry.
Physical science: light, forces, sound, electricity and Earth/space	Experience light, dark, reflection, shadows, forces and magnets; notice how sounds are made; explore simple electrical objects.	No discrete physical-science unit in the key-skills progression; build relevant experience through observation and everyday contexts.	No discrete physical-science unit in the key-skills progression; build relevant experience through observation and everyday contexts.	Explain light and shadows; compare movement on surfaces; investigate contact forces and magnets.	Explain sound through vibration, pitch and volume; construct simple electrical circuits and identify conductors and insulators.	Explain gravity, air/water resistance and friction; investigate levers, pulleys and gears; describe Earth, Sun and Moon movement.	Explain light travelling in straight lines; investigate and explain circuit variation, voltage and component function using recognised symbols.
Working scientifically	Ask simple questions; observe closely with support; suggest what might happen; gather and record simple observations.	Ask simple questions; observe closely using simple equipment; perform simple tests; identify/classify; gather and record data; use observations to suggest answers.	Ask simple questions; observe closely using simple equipment; perform simple tests; identify/classify; gather and record data; use observations to suggest answers.	Ask relevant questions; choose enquiry types; set up practical, comparative and fair tests; make systematic observations and measurements; record, present and report findings; draw conclusions and use evidence.	Ask relevant questions; choose enquiry types; set up practical, comparative and fair tests; make systematic observations and measurements; record, present and report findings; draw conclusions and use evidence.	Plan enquiries and control variables where necessary; take increasingly accurate measurements and repeat readings; record complex data; make predictions; report conclusions and causal relationships; use evidence to support or refute ideas.	Plan enquiries and control variables where necessary; take increasingly accurate measurements and repeat readings; record complex data; make predictions; report conclusions and causal relationships; use evidence to support or refute ideas.