



Progression of Knowledge in Primary Science (Primary Knowledge Curriculum)

Plants

EYFS	Children know about similarities and differences in relation to living things. They talk about how environments might vary from one another. They make observations of plants and explain why some things occur and talk about changes.
Year 1	What plants need to grow, the parts and functions of plants, food production, flowers and seeds, deciduous and evergreen. How plants obtain food.
Year 2	Seeds and bulbs, plants and water, light, temperature, healthy plants.
Year 3	Functions of plants: roots, stem/trunk, leaves and flowers, Life and growth, variety of plants, water transportation, seed formation and dispersal. Life cycles of a plant.
Year 4	Classification of plants.
Year 5	Life process of reproduction in some plants, Photosynthesis, vascular and non-vascular plants.
Year 6	Classifying organisms, plant cells, fungi, taxonomy and Latin names Asexual reproduction, sexual reproduction in non-flowering and flowering plants, pollination, fertilisation.

Living Things and Their Habitats

EYFS	Children know about similarities and differences in relation to places and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes.
Year 1	Living things, naming animals, grouping animals, describing animals, how animals obtain food, offspring, caring for animal babies, caring for pets.
Year 2	Habitats: rainforest, desert, meadow and underground habitats. Food chains, oceans and undersea habitats, deep ocean habitats and habitat destruction and damage.
Year 3	Seasonal cycles and plants, animal migration. Life cycles of a frog.
Year 4	Cold-blooded or warm blooded, vertebrates or invertebrates, characteristics of animal classes. Habitats, interdependence of organisms and their environment, producers, consumers and decomposers, food webs, producers, predators and prey, human threats to the environment.
Year 5	Life cycles of a mammal, an amphibian, an insect and a bird, life process of reproduction in some animals.
Year 6	Classifying organisms and animal cells, protists, monera, taxonomy, Latin names, vertebrates. Reproduction in animals, growth stages.

The Human Body

EYFS	Children know about similarities and differences in relation to living things. They make observations and explain why some things occur and talk about changes.
Year 1	Naming parts of the body, the five senses and associated body parts, understanding sensory impairment.
Year 2	The skeletal and muscular systems, exercise, digestive system and healthy eating, circulatory system, preventing illness, germs and disease, animals and their offspring.
Year 3	The digestive system, teeth and senses, a healthy diet, nutrition, vitamins and minerals, skeletons and muscles for support, protection and movement.
Year 4	The muscular system, the skeletal system, the nervous system, the digestive system, teeth.
Year 5	Human growth stages, adolescence and puberty, The human reproductive system, The endocrine system.
Year 6	The circulatory system, the heart, the blood vessels, the blood, blood pressure and heart rate, changes to humans as we get older.

Rocks and Soils

EYFS	Children know about similarities and differences in relation to places and objects. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations explain why some things occur .
Year 1	N/A
Year 2	N/A
Year 3	Sorting rocks, how rocks are formed, hardness and permeability, fossils, soil.
Year 4	N/A
Year 5	N/A
Year 6	N/A

Forces

EYFS	Children know about similarities and differences in relation to objects and materials They make observations explain why some things occur and talk about changes.
Year 1	Classification of materials, magnets, magnetic attraction.
Year 2	N/A
Year 3	Forces, friction, magnets, magnetic poles, magnetic fields, law of magnetic attraction, compasses.
Year 4	N/A
Year 5	Gravity, friction, air resistance, water resistance, pulleys, gears and levers.
Year 6	N/A

Light

EYFS	Children know about similarities and differences in relation to places, objects and materials. They make observations and explain why some things occur and talk about changes.
KS1	N/A
Year 3	How light travels, shadows, transparent and opaque objects, reflection, mirrors: plane, concave, convex, how shadows change throughout the day.
Year 4	N/A
Year 5	N/A
Year 6	How light travels, Our eyes, light sources, shadows, periscopes

Electricity

EYFS	Children know about similarities and differences in relation to objects and materials. They make observations and explain why some things occur and talk about changes.
Year 2	Circuits, conductive and non-conductive materials, safety rules.
Year 3	N/A
Year 4	Electric current, circuits, switches, conductors and insulators.
Year 5	N/A
Year 6	Brightness, buzzers, voltage, switches, simple circuits and symbols

Sound

EYFS	Children know about similarities and differences in relation to places, objects and materials. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations and explain why some things occur and talk about changes.
Year 4	How sound is created, how sound travels, sound waves, speed of sound, pitch, intensity, the human voice, hearing, the human ear.
Year 5	N/A
Year 6	N/A

Materials

EYFS	Children know about similarities and differences in relation to objects and materials. They talk about the features of their own immediate environment. They make observations and explain why some things occur and talk about changes.
Year 1	Classification of materials.
Year 2	Comparing materials, changing materials, concepts of atoms, matter, solids, liquids, gases, measurements.
Year 3	N/A
Year 4	Change of state, evaporation, condensation, precipitation, humidity, groundwater.
Year 5	Properties- solubility, conductivity, flexibility, fair testing, solubility, separation of mixtures, reversible changes- dissolving, mixing, change of state.
Year 6	N/A

Earth and Space (including seasonal changes)

EYFS	Children know about similarities and differences in relation to places. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations and explain why some things occur and talk about changes.
Year 1	The four seasons, tools to record the weather, daily weather and weather forecasts, weather symbols, weather around the world, floods and hurricanes. The Earth's natural resources, conservation of natural resources, logging, recycling, how pollution is caused and can be prevented.
Year 2	Our solar system, orbit and rotation, sun, moon, planets, stars, constellations.
Year 3	Seasonal cycles
Year 4	N/A
Year 5	The Big Bang theory, gravity, the Universe, our Solar System, the moon and our galactic neighbourhood. Weather and climate, the atmosphere, the Ozone layer, air movement and wind direction, cold and warm fronts, thunder and lightning.
Year 6	N/A

Evolution and Inheritance

EYFS	N/A
Year 1	N/A
Year 2	N/A
Year 3	N/A
Year 4	N/A
Year 5	N/A
Year 6	Fossils, adaptation, characteristics passing through generations, Mary Anning, Alfred Wallace, Charles Darwin, Darwin's sketches of finches.