Highgate Primary Science Curriculum 2024

Key Vocabulary
Supplementary vocabulary

Plants
Animals including Humans
Living Things and their Habitats
Seasonal Changes
Evolution and Inheritance
Materials (and States of Matter)

Rocks
Light, Sound and Electricity
Forces and Magnets
Earth and Space
Environmental Science
SRE
Working Scientifically

Year 4

Autumn 2 Sound and Vision	Spring 2 Flight	Summer 1 Away from Home	Summer 2 Active Planet
Light • Recognise that light is needed to see things and that dark is the absence of light • Notice that light is reflected from different surfaces • Recognise that light from the sun can be dangerous and that there are ways to protect our eyes • Recognise that shadows are formed when light from a light source is blocked by a solid object • Find patterns that determine the size of shadows *Vocabulary* *light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous* **Sound** • Identify how sounds are made, and associate some with vibration • Understand that vibrations from sound travel through a medium to the ear • Link pitch of a sound to the features of the object that made it • Link the volume of a sound to the strength of vibrations that made it. • Recognise sounds get fainter as the distance from the sound source increases *Vocabulary* *sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, loud, insulation* **Electricity** • Identify common appliances that run on electricity • Make a simple circuit, identifying basic parts • Identify whether a lamp will go on in a simple circuit • Understand the role of a switch in a simple circuit • Recognise common conductors and insulators *Vocabulary* *electricity, electrical appliance/device, mains, plug, electrical circuit, complete circuit, component, cell, battery, positive, negative, connect/connections, loose connection, short circuit, crocodile clip, bulb, switch, buzzer, motor, conductor, insulator, metal, non-metal, symbol*	**Living things and their habitats** • Recognise that living things can be grouped in a variety of ways. • Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment • Recognise that environments can change and that this can sometimes pose dangers tor living things *Vocabulary* *classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate* **Animals** • Construct and interpret a variety of food chains, identifying producers, predators and prey *Vocabulary* *herbivore, carnivore, omnivore, producer, predator, prey, food chain* **Forces** • Explain that unsupported objects fall towards Earth due to the force of gravity (Y5) • Identify the effects of air resistance, water resistance and friction, that act between moving surfaces (Y5) *Vocabulary* *force, gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, levers, pulleys, gears*	**Animals including humans** • Understand the simple functions of the basic pats of the human digestive system • Identify different kinds of human teeth and their simple function *Vocabulary* *digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, nutrients, large intestine, rectum, anus, teeth, incisor, canine, molar, premolars*	**States of matter*** • Know that rocks change state as they change temperature *Vocabulary* *minerals, igneous, sedimentary, metamorphic, volcano, molten, magma, solid, liquid, temperature, pressure, heat* **Rocks*** • Compare and group together different kinds of rocks based on appearance and simple physical properties **Y3 objectives revisited due to topic* *Vocabulary* *rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorb water, soil, fossil, marble, chalk, granite, sandstone, slate, soil, peat, sandy/chalk/clay soil*

Working Scientifically (throughout the year)

- Asking relevant questions and using different types of scientific enquiries to answer them
- Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- Setting up simple practical enquiries, comparative and fair tests
- Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- Using straightforward scientific evidence to answer questions or to support their findings
- Identifying differences, similarities or changes related to simple scientific ideas and processes
- Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions

Vocabulary

practical work, fair testing, relationships, accurate, thermometer, data logger, stopwatch, timer, estimate, data, diagram, identification key, chart, bar chart, prediction, similarity, difference, evidence, information, findings, criteria, values, properties, characteristics, conclusion, explanation, reason, evaluate, improve