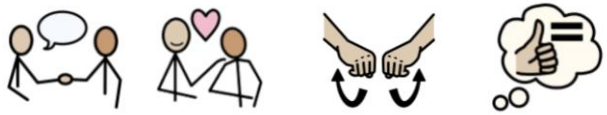
Hanley St Luke's Science Progression of Skills 2026-27

"I have come that they may have life and have it to the full." (John 10:10)

Skills Builder





Year 1 and 2

Working Scientifically

- Ask simple questions and recognise that they can be answered in different ways.
- Observe practical investigations that use simple equipment.
- Suggests answers to questions from observations and class ideas.
- Gather and record data to help to answer questions.
- Perform simple tests in the form of an investigation.
- Identify and classify both living and non-living things.

Year 1 Key Vocabulary:

Biology:

- **Senses:** hear, smell, touch, taste, see
- **Animals:** beak, wing, paw, feathers, claw, talons
- **Main body parts:** head, neck, arms, elbows, legs, knees, face, ears, hair, mouth, teeth, abdomen, chest, shoulders, toes
- **Classification:** mammal, living, bird, fish, reptile, amphibian

- **Movement:** fly, swim, crawl, run
- **Plants:** plant, root, grow, branch, deciduous, evergreen, tree, flower, leaf, seed, stem, soil, trunk, to plant, to water
- **Types of plants:** tree, daisy, birch, dandelion, fir tree, buttercup, wild plant, pine tree, fruit, flower, nettle, oak tree, holly, vegetable, weed, sycamore tree

Chemistry:

- **Properties:** fragile, heavy, light, hard, soft, smooth, rough, squidgy, waterproof, strong, weak, bumpy, stretchy, see-through, breakable
- **Materials:** plastic, wood, rubber, fabric, metal, brick, rock, glass, paper, material, cotton

Physics:

- **Seasons:** autumn, spring, winter, summer, seasons, grow, new life, year, change, tree, plant, shadow
- **Weather types:** sun, snow, rain, hail, wind
- **Temperature:** cold, hot, warm

Year 2 Key Vocabulary:

Biology:

- **Animals:** animals, plants senses
- **Health:** illness, medicine, exercise, hygiene, healthy, diet, fit, nutrition, unhealthy diet
- **Life processes:** survive, living, movement, respiration, growth, basic needs, reproduction, excretion, life process
- **Life cycles:** spring, life cycle, baby, child, teenager
- **Plants:** compost, sunlight, temperature, plant, tree, deciduous, evergreen
- **Parts of a plant:** flower, roots, stem leaf, bulb, seed, seedling
- **Living Things:** alive, conditions, adapted, animals, plants, living, dead, survive, basic needs, life process, food chain
- **Habitats:** woodland forest, jungle, polar region, desert, mountain, habitat

Chemistry:

- **Properties:** fragile, heavy, light, hard, soft, smooth, rough, squidgy, waterproof, strong, weak, bumpy, stretchy, see-through, breakable
- **Materials:** plastic, wood, rubber, fabric, metal, brick, rock, glass, paper, material, cotton, wool, fleece

Year 3 and 4

Working Scientifically

- Ask relevant questions using different types of scientific investigations.
- Set up simple practical investigations and begin to ensure that they are comparative and fair.
- Make systematic and careful observations.
- Start to take accurate measurements using standard units and a range of equipment including thermometers and data loggers.
- Gather, record, classify and present data in a variety of ways in order to answer questions.
- Use scientific language to record findings, drawings, labelled diagrams, keys, bar charts and tables.
- Use results from investigations, including oral and written explanations, displays or presentations of results and conclusions.
- Identify differences, similarities or changes in simple scientific ideas and processes.
- Use simple scientific evidence to answer questions and support findings.

Year 3 Key Vocabulary:

Biology:

- **Skeletal system:** skeleton, muscle, bone, skull, ribs, spinal column, backbone, joints, sockets, femur, collarbone, humerus, ulna, radius, hip, pelvis, fibula, tibia, kneecap, shoulder blade, movement, support, protection, contract, relax
- **Classification:** vertebrates, invertebrates, insects, minibeasts, mammals, reptiles, fish, birds, amphibians
- **Nutrition:** food, growth, healthy, unhealthy, nutrition, exercise, balanced diet, sugar, fruit, vegetables, protein, carbohydrates, fat, dairy, vitamins, minerals
- **Plants:** vegetable, plant
- **Reproduction:** pollen, pollination, pollinators, formation, dispersal, reproduce
- **Parts of a plant:** root, branch, seed, flower, leaf, seedling, stem, bulb, fruit, flower, blossom, trunk
- **Needs of a plant:** compost, nutrients, grow, air, light, soil

Chemistry:

- **Rocks:** rocks, soils, stone, pebbles
- **Types of rock:** slate, marble, chalk, granite, sandstone, clay
- **Properties:** hard, soft, permeable, appearance, physical properties, acid
- **Rock formation:** sedimentary, metamorphic, igneous, magma, bedrock, fossil

Physics:

- **Forces:** contact, non-contact, iron, force, pull, push, magnet, poles, attract, repel, magnetic, non-magnetic, metal, stronger, weaker, movement, bigger, smaller force
- **Light:** dark, absence of light, luminous, travel, reflection, reflect, shadow, see, eyes, mirror, direction, straight lines
- **Light source:** torch, sunlight, light source
- **Properties:** opaque, translucent, transparent, reflective, block

Year 4 Key Vocabulary:

Biology:

- **Teeth: c**anines, incisor, molars, premolars
- **Diet/digestion:** carnivore, herbivore, omnivore, digestion, large intestines, oesophagus, peristalsis, predator, prey, producer, saliva, small intestines, stomach
- **Environment:** adaptation, pollution, habitats, environment, environmental change,
- **Classification:** exoskeleton, mammal, reptile, bird, amphibian, key, classify, vertebrate, invertebrate, pigeon, eagle, gull, minibeast, insect
- **Life processes:** movement, respiration, growth, reproduction, excretion

Chemistry:

- **Temperature:** temperature, group, property, compare, particle, thermometer, research, change, degrees Celsius, observe
- **States of matter:** solid, liquid, gas, state of matter, carbon dioxide, oxygen, helium, natural gas, air
- **Processes:** solidify, heat, measure, condensation, boiling, cool, condense, evaporation, evaporate, melt/melting, freeze/freezing
- **Water cycle:** water cycle, precipitation, collection, condensation, evaporation, droplet

Physics:

- **Electricity:** appliance, battery, conductor, circuit, components, current, electrical, insulator, mains power, portable, pylon, switch

Year 5 and 6

Working Scientifically

- Plan different types of scientific investigation to answer questions, ensuring that variables are recognised and controlled when necessary.
- Begin to take increasing accurate and precise measurements, using a range of scientific equipment and repeat readings when required.
- Record data and results increasing in complexity using diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Use test results to make predictions to more investigations and ensure that these investigations are always comparative and fair.
- Report and present findings from investigations, include conclusions, casual relationships and explanations of degree of trust in results, in both an oral and written form such as displays and presentations.
- Identify that scientific evidence can be used to support or refute ideas and arguments.

Year 5 Key Vocabulary:

Biology:

- **Reproduction/stages of life:** baby, toddler, child, teenager, adult, senior, death, puberty, fertilise, egg, sperm, conception, foetus, womb, birth, develop, grow, change
- **Classification:** mammal, reptile, bird, fish, amphibian, insect
- **Life processes:** nutrition, movement, respiration, reproduction, excretion, growth, sensitivity
- **Life cycles:** egg, life cycle, womb, fertilisation, pollination, pollen, stamen, pistil, seed dispersal

Chemistry:

- **Changes:** change, reversible, irreversible, saturation, insulation
- **Properties:** flexible, soluble, insoluble, durable, thermal, magnets, magnetic, permeable, absorbent
- **Processes:** dissolving, evaporating, sieving, filtration, heat, boiling, condensing, evaporation, freezing, melting, chemical change, physical change

Physics:

- **Forces:** gear, lever, pull, newton meter, surface area, push, pull, movement, grip, contact, streamlined
- **Types of force:** repel, upthrust/buoyancy, friction, air resistance, gravity, drag
- **Space:** day, month, year, gravity, shadow, time zones, revolve, orbit, spin, rotate, axis, reflect
- **Solar system:** Neptune, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Earth, Sun, Moon, planet, star, space, solar system
- **Phases of the Moon:** waning gibbous, waxing gibbous, waxing crescent, waning crescent, last quarter, full Moon, first quarter, new moon

Year 6 Key Vocabulary:

Biology:

- **Circulatory system:** heart, heartbeat/heart rate, pulse, muscle, blood vessel, lungs, oxygen, oxygenated blood, deoxygenated blood, circulate, vein, artery
- **Diet:** diet, exercise, unhealthy, harmful, healthy, nutrients, water, transport, hygiene, smoking, alcohol, overweight
- **Living things:** characteristics, classify, environment, compare, features, classification key, key, flowering plant, non-flowering plant
- **Classification:** vertebrate, invertebrate, exoskeleton, vascular, non-vascular, taxonomy, herbivore, carnivore, omnivore, mammal, reptile, amphibian, bird, pigeon, eagle, seagull, fish
- **Microorganisms:** microorganism, bacteria, virus, fungi

- **Evolution:** environment, gene, natural selection, organism, evolution, change over time, species, population, features, trait, inherited, characteristics, reproduce, offspring, variation, mutation, survive, survival of the fittest, adaptation

Physics:

- **Electricity:** appliance, battery, conductor, circuit, components, current, electrical, insulator, mains power, pylon, renewable energy, non-renewable energy
- **Light:** dark, absence of light, luminous scattering, absorption, refraction, travel, direction, straight lines, bend, reflective, mirror, reflection, reflect, block, shadow, cast rainbow, colours see, eyes
- **Light source:** torch, light beam, Sun, light, light source, light ray
- **Properties:** opaque, translucent, transparent