

1. Thinking and Working Scientifically

- Asking investigable scientific questions
- Making predictions using prior observations or simple scientific ideas
- Planning simple investigations and fair tests
- Recognising variables informally: what changes, what is measured, and what stays the same
- Observing closely and comparing results
- Measuring with standard and non-standard units where appropriate
- Using simple scientific equipment safely
- Recording results in tables, labelled drawings, and simple charts
- Presenting results using bar charts or simple line graphs where appropriate
- Identifying patterns and simple anomalies in results
- Drawing conclusions from evidence
- Suggesting simple improvements to methods
- Safety and responsible practical work

2. Biology: Living Things, Plants, Animals, Humans, and Habitats

- Living things and non-living things
- Introductory cells as the basic units of living things where appropriate
- Plant parts and their functions: roots, stems, leaves, flowers, fruits, and seeds
- Conditions needed for plant growth: light, water, air, space, and suitable temperature
- Life cycles of plants and animals
- Animals, habitats, and introductory adaptation
- Food chains and simple food webs
- Producers, consumers, and decomposers at an introductory level where appropriate
- Human body basics: skeleton, muscles, digestion, breathing, and circulation at a simple level
- Nutrition, hygiene, exercise, sleep, and healthy lifestyles
- Microorganisms as helpful or harmful at an introductory level
- Similarities, differences, and classification of living things

3. Chemistry: Materials, States, Mixtures, and Changes

- Common materials and their uses
- Properties of materials: hardness, flexibility, transparency, absorbency, magnetism, introductory conductivity, solubility, and strength
- Grouping and classifying materials by properties
- Choosing materials for a purpose
- Solids, liquids, and gases
- Simple particle-model language where appropriate
- Heating and cooling effects on materials
- Changes of state: melting, freezing, evaporation, and condensation
- Introductory reversible and irreversible changes
- Dissolving and simple solutions
- Mixing and separating materials
- Separation methods: sieving, filtering, evaporation, and magnets
- Safe handling of common substances

4. Physics: Forces, Motion, Light, Sound, Electricity, and Magnetism

- Forces as pushes and pulls
- Introductory contact and non-contact forces
- Motion: starting, stopping, speeding up, slowing down, and changing direction
- Introductory friction, air resistance, and water resistance
- Gravity and its everyday effects
- Simple comparisons of speed using distance and time where appropriate
- Introductory simple machines: levers, pulleys, wheels, axles, and gears
- Light sources, reflection, seeing objects, and shadows
- Sound as vibration; introductory pitch and loudness
- Electricity in everyday life and electrical safety
- Simple circuits, components, conductors, and insulators
- Magnets, magnetic materials, attraction, repulsion, and simple magnetic fields

5. Earth and Space

- Earth materials: rocks, soils, minerals, sand, and water
- Simple properties and uses of Earth materials
- Introductory weathering and erosion
- The water cycle: evaporation, condensation, precipitation, and collection
- Weather observations and weather measurement
- Basic distinction between weather and climate where appropriate
- Seasonal patterns and daylight changes
- Earth, Sun, and Moon relationships at an age-appropriate level
- Day and night
- The Sun as a source of heat and light
- The Moon, stars, and observable sky patterns
- Caring for the local and global environment
- Introductory conservation of water and resources

6. Science in STEM Contexts

- Simple investigations and fair comparisons
- Measurement, recording, and data interpretation
- Choosing materials for practical purposes
- Simple design, testing, and improvement tasks
- Health, safety, environment, and responsible choices
- Interpreting scientific diagrams, models, and results
- Applying science knowledge to everyday technologies and simple systems