



Scope and sequence

Topic	Page	Objectives
Topic 1 Plant parts: roots and stems 	8	State the functions of a plant's roots State the functions of a plant's stem
Topic 2 Plant parts: branches and leaves	12	Explain how leaves help plants make food Describe how branches support leaves
Topic 3 Looking at flowers	16	Compare different flowers Explain that the flowers of some plants become fruits that contain seeds Collect and draw specimens
Topic 4 Germination and growth	20	Describe the stages of germination Observe and record the germination and growth of a bean Describe the conditions needed for germination
Topic 5 How animals respond to heat and cold 	26	Describe some different ways in which animals respond to heat and cold Describe how animals may use the heat of the sun to warm their bodies or use their bodies or their environment to avoid overheating Show the cooling effect of water as it evaporates and the insulating properties of fur
Topic 6 How animals are born and grow 	30	Classify animals as oviparous (egg-layers) or viviparous (live-bearers) Discuss the connection between the number of eggs or litter size and the degree of care from the parents
Topic 7 How my body grows 	36	Describe the different stages of human growth and development Identify how the children in your class have changed and grown
Topic 8 Different kinds of food	40	Explain why we need food Group foods according to type Explain some of the effects that different food types have on the body
Topic 9 A balanced diet	44	Explain that a good diet has a mixture of different foods Plan a healthy meal Identify foods that should be avoided in excess
Topic 10 Keeping food clean and safe	48	Explain that germs cause disease Identify routes through which food becomes contaminated Know that proper hygiene, cooking and preserving keeps food safe

Topic	Page	Objectives
Topic 11 What is matter? 	54	Explain that the things around us are made from matter Explain that matter has mass and takes up space Use a balance to compare masses Show that the mass of material remains unchanged when it is together or in parts
Topic 12 Investigating materials	58	Describe the different properties of materials Identify different materials and the purposes for which they are used Relate the properties of materials to their uses
Topic 13 States of matter	62	Classify matter as solid, liquid or gas Compare the properties of the different states of matter
Topic 14 Changing state	66	Observe and give examples of freezing, condensing, evaporating, melting, boiling Discuss how the mass and volume of water change when it changes state
Topic 15 Light and colour	70	Classify light sources as natural or artificial Investigate the properties of light from different sources Demonstrate that light travels in straight lines Make a spectrum (rainbow) from white light Make invisible ink
Topic 16 The sun, the Earth and the moon 	76	Describe the motion of the Earth around the sun Explain why we have day and night Identify and compare the sun, the Earth and the moon
Topic 17 The changing moon	80	Describe the motion of the moon around the Earth Explain why the shape of the moon appears to change (the phases of the moon) Describe the relationship between the phases of the moon and the months of the year
Topic 18 The planets	84	Name the eight planets of the Solar System Describe the main features of each planet