



Key Knowledge

Need to know

- To know the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.
- To know the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.
- To know the way in which water is transported within plants.
- To know the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

Neat to know

- Plants can make their own food.

Working Scientifically

- Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.

Text



Vocabulary

roots	These anchor the plant into the ground and absorb water and nutrients from the soil.	
stem	This holds the plant up and carries water and nutrients from the roots to the leaves.	
leaves	These make food for the plant using sunlight and carbon dioxide.	
flower	The part of a plant that blossoms. Flowers produce seeds.	
pollination	Pollen is transferred from the male anther of a flower to the female stigma.	
seed formation	A seed is a small, unborn plant usually with some stored food.	
seed dispersal	The movement or transport of seeds away from the parent plant.	



Key Knowledge

Need to know

- Animals, including humans, need the right type and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.
- Humans and some other animals have skeletons and muscles for support, protection and movement.

Neat to know

- To know the main muscles in the human body.
- To know the main bones in the human skeleton.

Working Scientifically

- Ask relevant questions and use different types of scientific enquiries to answer them.
- Identify differences, similarities or changes related to simple scientific ideas and processes.
- Gather, record, classify and presenting data in a variety of ways to help in answering questions.

Text



Vocabulary

nutrition	It is the food necessary for health and growth.	
skeleton	It is made mainly of bone and supports our body.	
muscle	Muscles are attached to bones by tendons and help us move.	
diet	The kinds of food that a person or animal normally eats.	
joint	A point where two parts of the skeleton are fitted together.	
cartilage	Connective tissue between bones and in the nose and ears.	
tendon	Connective tissue that attaches muscles to bones.	
bone	White, hard tissue that makes up the skeleton.	



Light



Key Knowledge

Need to know

- Light is needed in order to see things, and dark is the absence of light.
- Light is reflected from surfaces.
- Light from the sun can be dangerous.
- Shadows are formed when the light from a light source is blocked by an opaque object.

Neat to know

- To know how and why the size of shadows can change.

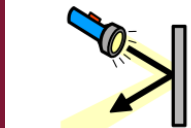
Working Scientifically

- Gather, record, classify and present data in a variety of ways to help in answering questions.
- Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.

Text



Vocabulary

reflection	A ray of light hits a surface and bounces off it.	
shadow	An opaque object blocks the light and makes a shadow.	
light source	Anything that makes light – natural or man-made.	
opaque	An object that does not allow light to pass through it.	
transparent	An object that allows light to pass through it so it can be clearly seen.	
translucent	An object that allows light, but not detailed shapes, to pass through.	
mirror	A surface, usually glass, which reflects a clear image.	
sunlight	Light from the sun.	



Rocks



Key Knowledge

Need to know

- To know the different kinds of rock based on their appearance and simple physical properties.
- Fossils are formed when things that have once lived are trapped within rock.
- Soils are made from rocks and organic matter.

Neat to know

- To know the rock cycle.

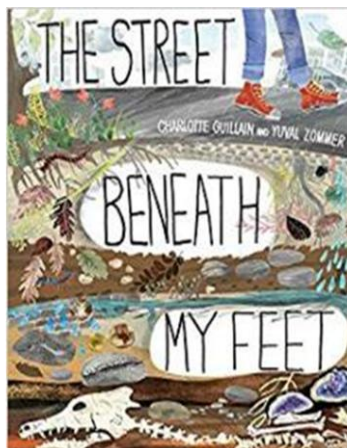
Vocabulary

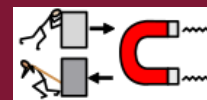
fossil	The preserved remains or traces of a dead organism.	
soil	A material typically consisting of organic remains, clay, and rock particles.	
sedimentary rocks	Formed when sand, mud and pebbles get laid down in layers.	
metamorphic rocks	Start as another type of rock and are made due to heat and pressure.	
igneous rocks	Formed when magma cools and solidifies above or below the Earth's surface.	
organic matter	Composed of the faeces and remains of organisms such as plants and animals.	
crystals	A special material where the molecules fit together in a repeating pattern.	

Working Scientifically

- Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Identify differences, similarities or changes related to simple scientific ideas and processes.

Text





Key Knowledge

Need to know

- To know how objects, move on different surfaces.
- Some forces need contact between two objects, but magnetic forces can act at a distance.
- Magnets attract or repel each other and attract some materials and not others.
- To know whether everyday objects are attracted to a magnet, and identify some magnetic materials.
- Magnets have two poles.
- Magnets will attract or repel each other, depending on which poles are facing.

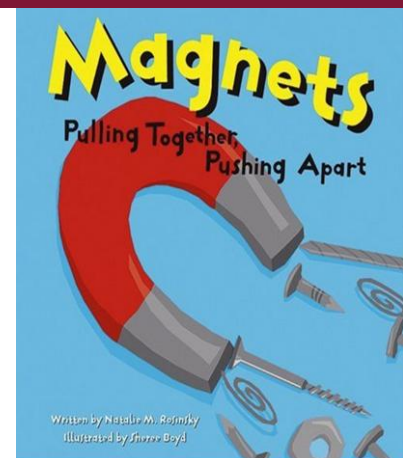
Neat to know

- Magnets are used in everyday life and have different uses.

Working Scientifically

- Set up simple practical enquiries, comparative and fair tests.
- Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.

Text



Vocabulary

force	A push or pull on an object, which can cause it to move, or change speed, direction or shape.	
magnet	A magnet produces a magnetic field. It can either attract or repel certain materials.	
attract	To pull towards. The opposite of repel.	
repel	To push away. The opposite of attract.	
magnetic pole	A region at each end of a magnet where the external magnetic field is strongest.	
gravity	Attracts objects towards the centre of the earth, or towards any other object having mass.	
friction	The resistance that one surface or object <u>encounters</u> when moving over another.	