

Hopton C of E Primary Academy

Science Subject Overviews

LKS2

Title	<u>Animals including humans Y3</u> We are learning to identify that animals need the right types of nutrition. We are also learning about skeletons and muscles and how they support us, protect us and help us move.
Overview of Unit	In this unit, pupils learn that animals, including humans, need the right types and amounts of nutrition to stay healthy. They explore different food groups and understand that animals cannot make their own food and must obtain nutrition from what they eat. Pupils begin to understand the importance of a balanced diet and how nutrients help the body function. Children also learn about the human skeleton and muscles. They identify the main parts of the skeleton and explore how skeletons and muscles support the body, protect organs and help movement. Throughout the unit, pupils use scientific vocabulary to compare, describe and explain how bodies function.
Key Vocabulary	<i>skeleton, bones, muscles, support, protection, movement, nutrition, nutrients, diet, balanced diet, food groups, carbohydrates, proteins, fats, skeleton, skull, ribs, spine, vertebrate, invertebrate, animals, human, structure, function, joints, compare, describe</i>
Key Learning Objectives	- I am learning to identify the nutrients animals, including humans, need to stay healthy. - I am learning to explain the importance of a balanced diet. - I am learning to identify the main parts of the human skeleton. - I am learning to explain how skeletons protect and support the body. - I am learning to investigate how muscles and joints help movement.
Key knowledge	1. Animals, including humans, need the right types and amounts of nutrition. 2. Animals cannot make their own food and get nutrition from what they eat. 3. A balanced diet includes different food groups. 4. Skeletons support and protect the body. 5. Muscles work with bones to help movement. 6. Humans and some animals have skeletons for support, protection and movement.
Skills to be Covered	● Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat ● Identify that humans and some other animals have skeletons and muscles for support, protection and movement.
Suggested Learning Activities	● Designing balanced meal plates ● Investigating food groups and nutrients ● Creating life-size skeleton outlines ● Exploring movement through muscle and joint activities ● Comparing vertebrates and invertebrates



	● Building simple moving hand or joint models ● Investigating how muscles work in pairs ● Labelling skeleton diagrams ● Carrying out exercise and movement challenges ● Retrieval games and scientific vocabulary quizzes
End of assessment quiz	<i>Each quiz should also revisit two questions from previous units</i> 1. Why do animals need nutrition? 2. What is a balanced diet? 3. Name one job of the skeleton. 4. How do muscles help the body move? 5. What is the difference between a vertebrate and an invertebrate? 6. Name one nutrient found in food.

Title	<u>Animals including humans Y4</u> We are learning about the function of the digestive system, the different types of teeth in humans. We are learning to construct and interpret a variety of food chains, identifying producers, predators and prey.
Overview of Unit	In this unit, pupils learn about the human digestive system and explore how food is broken down and used by the body. They identify the main parts of the digestive system and describe the function of each part, including the mouth, oesophagus, stomach and intestines. Pupils also investigate the different types of human teeth and understand how they help us eat and digest food. Children explore food chains and learn how living things depend on one another for food. They construct and interpret food chains, identifying producers, consumers, predators and prey. Throughout the unit, pupils use scientific vocabulary to explain processes, classify living things and describe feeding relationships.
Key Vocabulary	<i>teeth, incisors, canines, molars, digestion, digestive system, mouth, oesophagus, stomach, intestines, tongue, saliva, food chain, producer, consumer, predator, prey, environment, habitat, classification, change, adapt, environment, teeth types, food, break down</i>
Key Learning Objectives	- I am learning to identify the main parts of the digestive system. - I am learning to explain the functions of the digestive system. - I am learning to identify different types of human teeth and their functions. - I am learning to construct and interpret simple food chains. - I am learning to identify producers, consumers, predators and prey within food chains.
Key knowledge	1. The digestive system breaks down food so the body can use it. 2. Different parts of the digestive system have different functions. 3. Humans have different types of teeth for different jobs. 4. Incisors cut, canines tear and molars grind food. 5. Food chains show how energy passes between living things. 6. Producers make their own food and consumers eat plants or animals. 7. Predators hunt prey for food.



Skills to be Covered	- Describe the simple functions of the basic parts of the digestive system in humans - Identify the different types of teeth in humans and their simple functions - Construct and interpret a variety of food chains, identifying producers, predators and prey
Suggested Learning Activities	- Creating digestive system diagrams and models - Carrying out a “human digestive system” practical demonstration - Investigating the different functions of teeth - Comparing animal teeth and diets - Constructing food chains using cards and role play - Exploring predator and prey relationships through games - Building food chain mobiles or diagrams - Investigating how food is broken down - Labelling scientific diagrams - Retrieval games and vocabulary challenges
End of assessment quiz	<i>Each quiz should also revisit two questions from previous units</i> - What is the job of the digestive system? - What happens in the stomach? - Which teeth are used for grinding food? - What is a producer? - What is the difference between a predator and prey? - What does a food chain show?

Title	<u>Forces and Magnets Y3</u> We will also be studying forces and magnets: comparing how things move on different surfaces.
Overview of Unit	In this unit, pupils explore different types of forces and investigate how objects move on different surfaces. They learn that forces such as pushes and pulls can affect movement and that friction can slow objects down. Pupils compare how objects travel across smooth and rough surfaces and begin to understand how contact forces work. Children also investigate magnets and magnetic forces. They explore how magnets can attract and repel each other and discover that magnetic forces can act at a distance. Pupils identify magnetic and non-magnetic materials and learn that magnets have north and south poles. Throughout the unit, pupils use practical investigations and scientific vocabulary to compare, test and explain forces and magnetism.
Key Vocabulary	<i>force, forces, push, pull, move, movement, direction, friction, surface, smooth, rough, magnet, magnets, magnetic, magnetic field, attract, attraction, repel, repulsion, north pole, south pole, bar magnet, ring magnet, strength, test, compare, investigate, material</i>
Key Learning Objectives	- I am learning to identify pushes and pulls as forces. - I am learning to investigate how objects move on different surfaces. - I am learning to explain how friction affects movement. - I am learning to identify magnetic and non-magnetic materials. - I am learning to investigate how magnets attract and repel.



Key knowledge	1. Forces can be pushes or pulls. 2. Friction affects how objects move across surfaces. 3. Rough surfaces create more friction than smooth surfaces. 4. Magnetic forces can act without objects touching. 5. Some materials are magnetic and some are not. 6. Magnets have north and south poles. 7. Opposite poles attract and the same poles repel.
Skills to be Covered	• Compare how things move on different surfaces • notice that some forces need contact between 2 objects, but magnetic forces can act at a distance • Observe how magnets attract or repel each other and attract some materials and not others • Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials • Describe magnets as having 2 poles • predict whether 2 magnets will attract or repel each other, depending on which poles are facing
Suggested Learning Activities	• Testing how objects move on different surfaces • Carrying out friction investigations using ramps and toy cars • Magnet treasure hunts around the classroom • Sorting magnetic and non-magnetic materials • Exploring magnetic attraction and repulsion through practical challenges • Designing simple magnetic games or mazes • Investigating how magnets work through prediction activities • Using magnets to move objects without touching them • Recording results in tables and diagrams • Retrieval games and scientific vocabulary quizzes
End of assessment quiz	<i>Each quiz should also revisit two questions from previous units</i> 1. What is a force? 2. Which surface creates more friction: smooth or rough? 3. What does a magnet attract? 4. What are the two poles of a magnet called? 5. What happens when two north poles face each other? 6. How are magnetic forces different from pushes and pulls? 7.

Title	<u>Rocks Y3</u> We are learning to compare and group different kinds of rocks based on their appearance and simple properties. We are learning how fossils are formed when things that have lived are trapped within a rock.
Overview of Unit	In this unit, pupils investigate and compare different types of rocks based on their appearance and physical properties. They explore rocks such as granite, chalk, sandstone and marble and learn how to group and classify them by features including texture, hardness and permeability. Children also learn about fossils and discover how they are formed when living things become trapped within layers of rock over time. Pupils explore different types of soil



	and recognise that soil is made from rocks and organic matter. Throughout the unit, pupils use observation, classification and practical investigations to compare and describe rocks and soils using scientific vocabulary.
Key Vocabulary	<i>rocks, rock, soil, fossil, fossils, sedimentary, igneous, metamorphic, marble, granite, sandstone, chalk, limestone, texture, hard, soft, permeable, impermeable, layer, layers, grain, crystal, particles, formation, formed, weathering, erosion, transport, compare, observe, record, classify, property</i>
Key Learning Objectives	- I am learning to identify and compare different types of rocks. - I am learning to describe the physical properties of rocks. - I am learning to investigate which rocks are permeable or impermeable. - I am learning to explain how fossils are formed. - I am learning to identify that soils are made from rocks and organic matter.
Key knowledge	1. Rocks can be grouped by their appearance and physical properties. 2. Different rocks have different textures and levels of hardness. 3. Some rocks are permeable and some are impermeable. 4. Fossils are formed when living things are trapped in rock over time. 5. Soil is made from rocks and organic matter. 6. Rocks and soils can be observed, compared and classified.
Skills to be Covered	• Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties • Describe in simple terms how fossils are formed when things that have lived are trapped within rock • Recognise that soils are made from rocks and organic matter
Suggested Learning Activities	• Rock detective investigations using magnifiers • Sorting and classifying rocks by their properties • Testing rocks for hardness and permeability • Making simple fossil imprints using clay • Exploring different soil samples outdoors • Comparing textures and grains of rocks • Carrying out erosion demonstrations with water • Creating rock and fossil fact files • Recording observations in tables and diagrams • Retrieval games and scientific vocabulary quizzes
End of assessment quiz	<i>Each quiz should also revisit two questions from previous units</i> 1. Name one type of rock. 2. What does permeable mean? 3. How can rocks be grouped? 4. How are fossils formed? 5. What is soil made from? 6. Which rock property describes how hard or soft a rock is?

Title	Living Things and Habitats Y4 We will be looking at grouping and classifying in a variety of ways, we will name a variety of living things in their local and wider environment. Recognise that environments can change and that this can sometimes pose dangers to living things.
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Overview of Unit	In this unit, pupils learn how living things can be grouped and classified in a variety of ways. They explore the characteristics of plants and animals and use classification keys to identify and name living things found in local and wider environments. Pupils investigate vertebrates and invertebrates and compare features used for grouping and identification. Children also explore how environments can change over time and how these changes can affect living things. They investigate issues such as pollution, habitat loss and environmental change and consider how plants and animals adapt to survive. Throughout the unit, pupils use observation, comparison and classification skills to record and explain their findings using scientific vocabulary.
Key Vocabulary	<i>classification, classify, classification key, grouping, groups, living things, plants, animals, vertebrates, invertebrates, mammals, reptiles, amphibians, birds, fish, habitat, environment, local environment, wider environment, change, environmental change, danger, endangered, pollution, habitat loss, adaptation, adapt, survive, survival, identify, compare, characteristics, observe, record, feature</i>
Key Learning Objectives	- I am learning to identify the characteristics of living things. - I am learning to group living things in different ways. - I am learning to identify vertebrates and invertebrates. - I am learning to classify animals based on their characteristics. - I am learning to use classification keys to identify living things. - I am learning to investigate living things in the local environment. - I am learning to compare habitats in the local and wider environment. - I am learning to identify how environments can change. - I am learning to explain how environmental change can affect living things. - I am learning to describe how living things adapt to survive in changing environments.
Key knowledge	1. Living things can be grouped in different ways based on their characteristics. 2. Classification keys help identify and group living things. 3. Vertebrates have backbones and invertebrates do not. 4. Living things live in different habitats and environments. 5. Environments can change naturally or because of human actions. 6. Environmental change can create dangers for living things. 7. Some living things adapt to survive in changing environments.
Skills to be Covered	• 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 to living things
Suggested Learning Activities	• Outdoor classification hunts around the school grounds • Creating and using branching classification keys • Sorting animals using Venn diagrams and hoops • Investigating vertebrates and invertebrates • Habitat surveys and minibeast hunts • Matching living things to their environments • Exploring environmental change through case studies and images • Designing posters to protect endangered habitats



	• Comparing how animals adapt to survive • Retrieval games and scientific vocabulary challenges
End of assessment quiz	<i>Each quiz should also revisit two questions from previous units</i> 1. What is classification? 2. What is the difference between a vertebrate and an invertebrate? 3. What is a classification key used for? 4. Name one characteristic used to group animals. 5. What is habitat loss? 6. How can pollution affect living things?

Title	<u>Light Y3</u> We are learning to recognise the importance of light, look at how light is produced and how to keep our eyes safe. We will learn about shadows and look for patterns.
Overview of Unit	In this unit, pupils explore the importance of light and learn that light is needed in order to see things. They identify different light sources, including natural and artificial light, and investigate how light is reflected from surfaces. Pupils also learn about light safety and understand why direct sunlight can damage their eyes and how to protect them safely. Children investigate how shadows are formed when light is blocked by opaque objects. They explore how shadows change in size and shape depending on the position of the light source. Throughout the unit, pupils use observation and practical investigations to identify patterns and explain their findings using scientific vocabulary.
Key Vocabulary	<i>light, dark, darkness, light source, sources of light, natural, artificial, sun, torch, candle, flame, reflection, reflect, reflective, mirror, shiny, dull, shadow, shadows, opaque, translucent, transparent, block, blocked, direction, straight, travel, observe, pattern, investigate</i>
Key Learning Objectives	- I am learning to identify different sources of light. - I am learning to explain why light is needed to see things. - I am learning to investigate how light reflects from surfaces. - I am learning to explain how shadows are formed. - I am learning to investigate patterns in the size of shadows.
Key knowledge	1. Light is needed in order to see things. 2. Darkness is the absence of light. 3. Light comes from natural and artificial sources. 4. Light can reflect from surfaces. 5. The sun's light can be dangerous to our eyes. 6. Shadows form when light is blocked by an opaque object. 7. Shadows change size depending on the position of the light source.
Skills to be Covered	• Recognise that they need light in order to see things and that dark is the absence of light notice that light is reflected from surfaces • Recognise that light from the sun can be dangerous and that there are ways to protect their eyes • Recognise that shadows are formed when the light from a light source is blocked by an opaque object



	Find patterns in the way that the size of shadows change
Suggested Learning Activities	- Shadow investigations outdoors using sunlight - Creating shadow puppet theatres - Testing reflective materials with torches - Exploring transparent, translucent and opaque materials - Carrying out shadow size investigations - Light source scavenger hunts around the classroom - Designing posters about sun safety - Investigating how mirrors reflect light - Recording shadow patterns throughout the day - Retrieval games and scientific vocabulary quizzes
End of assessment quiz	<i>Each quiz should also revisit two questions from previous units</i> - Why do we need light to see? - Name one natural light source. - What does reflective mean? - How is a shadow formed? - What type of material blocks light completely? - How can you protect your eyes from the sun?

Title	States of Matter Y4 We are learning to compare and group materials together, according to whether they are solids, liquids or gases. We are learning to observe that some materials change state. We will also look at the water cycle.
Overview of Unit	In this unit, pupils learn to compare and group materials based on whether they are solids, liquids or gases. They investigate the properties of each state of matter and explore how particles behave differently in solids, liquids and gases. Pupils observe how some materials change state when heated or cooled and learn about processes such as melting, freezing, evaporation and condensation. Children also explore the water cycle and investigate how evaporation and condensation are involved in this continuous process. They examine how temperature affects evaporation and use observations and investigations to explain changes in state using scientific vocabulary.
Key Vocabulary	<i>states of matter, solid, liquid, gas, particle, particles, arrangement, movement, state, heating, cooling, temperature, change, melt, melting, freezing, freeze, evaporation, evaporate, condensation, condense, water cycle, cycle, precipitation, rain, snow, hail, puddle, water vapour, air, gas, container, volume, shape, flow, compare, observe, investigate</i>
Key Learning Objectives	- I am learning to identify and compare solids, liquids and gases. - I am learning to describe how materials change state when heated or cooled. - I am learning to investigate melting and freezing. - I am learning to explain evaporation and condensation. - I am learning to describe the stages of the water cycle.
Key knowledge	- Materials can exist as solids, liquids or gases. - Solids keep their shape, liquids flow and gases spread out.



	9. Heating and cooling can change the state of materials. 10. Melting changes a solid into a liquid and freezing changes a liquid into a solid. 11. Evaporation changes a liquid into a gas and condensation changes a gas into a liquid. 12. The water cycle includes evaporation, condensation and precipitation. 13. Higher temperatures increase the rate of evaporation.
Skills to be Covered	• Compare and group materials together, according to whether they are solids, liquids or gases • Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) • Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.
Suggested Learning Activities	• Sorting materials into solids, liquids and gases • Carrying out melting and freezing investigations • Exploring evaporation using puddle or water tray investigations • Creating water cycle diagrams and mini models • Investigating how temperature affects evaporation • Acting out particle movement in solids, liquids and gases • Measuring temperature changes using thermometers • Observing condensation on cold surfaces • Recording results in tables and diagrams • Retrieval games and scientific vocabulary challenges
End of assessment quiz	<i>Each quiz should also revisit two questions from previous units</i> 1. What are the three states of matter? 2. What happens during melting? 3. What is evaporation? 4. What is condensation? 5. Name one stage of the water cycle. 6. How does temperature affect evaporation?

Title	<u>Sound Y4</u> We are learning to identify how sounds are made, recognise vibrations and find patterns in sounds.
Overview of Unit	In this unit, pupils explore how sounds are made and learn that sounds are caused by vibrations. They investigate different sound sources and discover how vibrations travel through a medium, such as air, to the ear. Pupils explore how sound travels and observe how sounds become fainter as the distance from the source increases. Children also investigate pitch and volume and identify patterns between the features of objects and the sounds they produce. Through practical investigations and enquiries, pupils compare sounds, test materials and use scientific vocabulary to explain how sound works.
Key Vocabulary	<i>sound, sounds, vibration, vibrate, vibrating, source, sound source, ear, hearing, medium, air, travel, waves, sound waves, pitch, high pitch, low pitch, volume, loud, quiet, faint, distance, far, near, pattern, observe, compare, investigate, object, material, strength, change</i>



Key Learning Objectives	- I am learning to identify different sound sources. - I am learning to explain how sounds are made using vibrations. - I am learning to investigate how vibrations travel. - I am learning to explain how sound travels through a medium. - I am learning to compare sounds made by different objects. - I am learning to investigate patterns between pitch and vibrations. - I am learning to compare high-pitched and low-pitched sounds. - I am learning to investigate patterns between volume and vibration strength. - I am learning to explore how distance affects sound. - I am learning to use scientific vocabulary to explain how sound works.
Key knowledge	1. Sounds are made when objects vibrate. 2. Vibrations travel through a medium to the ear. 3. Sound can travel through solids, liquids and gases. 4. Pitch depends on how fast something vibrates. 5. Volume depends on the strength of vibrations. 6. Sounds become fainter as the distance from the source increases. 7. Different objects produce different sounds.
Skills to be Covered	• Identify how sounds are made, associating some of them with something vibrating • Recognise that vibrations from sounds travel through a medium to the ear • Find patterns between the pitch of a sound and features of the object that produced it • Find patterns between the volume of a sound and the strength of the vibrations that produced it • Recognise that sounds get fainter as the distance from the sound source increases
Suggested Learning Activities	• Making string telephones to investigate sound travel • Exploring vibrations using tuning forks and drums • Investigating pitch using elastic bands and instruments • Carrying out volume investigations with different forces • Sound walk investigations around the school • Creating homemade musical instruments • Testing how sound changes over distance • Investigating which materials block sound best • Recording sound observations in tables and diagrams • Retrieval games and scientific vocabulary challenges
End of assessment quiz	<i>Each quiz should also revisit two questions from previous units</i> 1. How are sounds made? 2. What is a vibration? 3. Through what medium does sound usually travel to our ears? 4. What is pitch? 5. What happens to sound as you move further away from the source? 6. How can you make a louder sound?



Title	<u>Plants Y3</u> We are learning to describe the functions of different parts of flowering plants, explore the requirements of plants for life and growth, investigate how water is transported in plants and explore the life cycle of flowering plants.
Overview of Unit	In this unit, pupils learn about the structure and function of flowering plants. They identify the different parts of plants, including roots, stems, leaves and flowers, and explore how each part helps the plant survive and grow. Pupils investigate what plants need for life and growth, including water, light, air and nutrients from the soil. Children also investigate how water is transported through plants and explore the life cycle of flowering plants. They learn about pollination, seed formation and seed dispersal and discover the important role insects and other pollinators play in reproduction. Throughout the unit, pupils use observation and practical investigations to explain plant growth and life cycles using scientific vocabulary.
Key Vocabulary	<i>roots, root system, stem, trunk, leaves, leaf, flowers, flower, petals, stamen, pollen, pollination, pollinator, insects, bees, life cycle, seed, seeds, seed formation, seed dispersal, wind, animals, water, nutrients, soil, minerals, air, light, growth, transport, xylem, water transport, absorb, photosynthesis, reproduce, reproduction, function, structure, lifecycle, healthy, observe</i>
Key Learning Objectives	- I am learning to identify and describe the functions of different parts of flowering plants. - I am learning to investigate what plants need for life and growth. - I am learning to explore how water is transported within plants. - I am learning to explain the role of flowers in plant reproduction. - I am learning to describe the life cycle of flowering plants, including pollination and seed dispersal.
Key knowledge	1. Different parts of plants have different functions. 2. Plants need water, light, air and nutrients to grow. 3. Roots absorb water and nutrients from the soil. 4. Water is transported through the stem to different parts of the plant. 5. Flowers are part of the plant life cycle and help reproduction. 6. Pollination leads to seed formation. 7. Seeds can be dispersed in different ways.
Skills to be Covered	● Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers ● Explore 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 ● Investigate the way in which water is transported within plants ● Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal
Suggested Learning Activities	● Dissecting flowers to identify different parts ● Investigating what plants need to grow ● Carrying out coloured water transport experiments ● Exploring seed dispersal through outdoor investigations ● Observing roots and shoots growing over time ● Pollination role-play activities ● Creating plant life cycle diagrams



	• Comparing plant growth in different conditions • Recording observations in plant diaries • Retrieval games and scientific vocabulary challenges
End of assessment quiz	<i>Each quiz should also revisit two questions from previous units</i> 1. What is the function of roots? 2. What do plants need to grow? 3. How is water transported through a plant? 4. What is pollination? 5. Name one way seeds can be dispersed. 6. Which part of the plant makes seeds?

Title	Electricity Y4 We are learning to identify what runs on electricity and construct a simple series electrical circuit, naming basic parts and test lamps and switches. We will recognise common conductors and insulators.
Overview of Unit	In this unit, pupils learn about electricity and identify common appliances that use electrical power. They explore how electricity travels through simple series circuits and learn the names and functions of basic electrical components including cells, wires, bulbs, switches and buzzers. Children build and test simple electrical circuits and investigate what happens when circuits are complete or incomplete. Pupils also explore conductors and insulators and investigate which materials allow electricity to pass through them. Throughout the unit, pupils use practical investigations and scientific vocabulary to explain how electrical circuits work.
Key Vocabulary	<i>electricity, electrical, circuit, circuit diagram, complete circuit, incomplete circuit, battery, cell, bulb, lamp, switch, wire, crocodile clip, buzzer, motor, component, components, flow, current, power, source, simple circuit, series circuit, conductor, insulator, metal, plastic, break, connect, test</i>
Key Learning Objectives	- I am learning to identify appliances that use electricity. - I am learning to construct a simple series electrical circuit. - I am learning to identify the components needed for a complete circuit. - I am learning to investigate how switches affect circuits. - I am learning to identify conductors and insulators.
Key knowledge	1. Many everyday appliances use electricity. 2. Electricity flows through a complete circuit. 3. A circuit needs a power source to work. 4. Switches open and close circuits. 5. Bulbs light when part of a complete circuit. 6. Conductors allow electricity to pass through them. 7. Metals are usually good conductors. 8. Insulators do not allow electricity to pass through them.
Skills to be Covered	• Identify common appliances that run on electricity • Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers



	● Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery ● Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit ● Recognise some common conductors and insulators, and associate metals with being good conductors
Suggested Learning Activities	● Building simple series circuits ● Testing different circuit components ● Circuit problem-solving challenges ● Investigating complete and incomplete circuits ● Conductors and insulators testing investigations ● Designing simple electrical games or quizzes ● Creating circuit diagrams using symbols ● Appliance hunts around the classroom or school ● Switch-building investigations ● Retrieval games and scientific vocabulary challenges
End of assessment quiz	<i>Each quiz should also revisit two questions from previous units</i> 1. What is needed to make a complete circuit? 2. What is the job of a switch? 3. Why will a bulb not light in an incomplete circuit? 4. What is a conductor? 5. Name one material that is a good conductor. 6. Name two components found in a simple circuit.