



## Key stage 2 Science National Curriculum coverage

### St Luke's CE Academy Endon

### Helping Lights Shine for all Luke 11:33

Year 3	Year 4	Year 5	Year 6
<p><u><i>What are forces and magnets? (Physics)</i></u></p> <p><b>Lesson 1:</b> What is the difference between push and pull?  <b>Objective:</b> Notice that some forces need contact between two objects  <b>Vocabulary:</b> force, push, pull, twist, contact force</p> <p><b>Lesson 2:</b> What impact does the surface have on how objects move?  <b>Objective:</b> Compare how things move on different surfaces.  <b>Vocabulary:</b> force, push, pull, material, surface, texture, friction, rough, smooth, hinder</p> <p><b>Lesson 3:</b> What are magnets?  Describe magnets as having two poles.  <b>Objective:</b> Compare and group together a variety of everyday materials on the basis of whether they are attracted to a</p>	<p><u><i>What are states of matter and how do they change? (Chemistry)</i></u></p> <p><b>Lesson 1:</b> What are the 3 states of matter?  <b>Objective:</b> Compare and group materials together, according to whether they are solids, liquids or gases.  <b>Vocabulary:</b> solid, liquid, gas, fixed volume, shape, pores, fills, no fixed shape/volume, particles</p> <p><b>Lesson 2:</b> Does gas weigh anything?  <b>Objective:</b> Compare and group materials together, according to whether they are solids, liquids or gases.  <b>Vocabulary:</b> Weigh, compare, bubbles, gas</p> <p><b>Lesson 3:</b> What makes materials change state?  <b>Objective:</b> Observe that some materials change state when they are heated or</p>	<p><u><i>What are the properties of materials and how do they change? (Chemistry)</i></u></p> <p><b>Lesson 1:</b> How can we group materials based upon their properties?  <b>Objective:</b> Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.  <b>Vocabulary:</b> properties, hardness (durability), solubility, transparency, conductivity, magnetic, reflection, porous</p> <p><b>Lesson 2:</b> Do all materials dissolve?  <b>Objective:</b> Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution.</p>	<p><u><i>How are plants and animals classified? (Biology)</i></u></p> <p><b>Lesson 1:</b> How can leaves be classified?  <b>Objective:</b> Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals  Give reasons for classifying plants and animals based on specific characteristics.  <b>Vocabulary:</b> leaf/leaves, groups, classify, veins, serrate edge, shape, birch, oak, lime, maple, sycamore, holly, ivy, beech, classification keys</p> <p><b>Lesson 2:</b> How can flowering plants be classified?  <b>Objective:</b> Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences,</p>



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<p>magnet and identify some magnetic materials.</p> <p><b><u>Vocabulary:</u></b> magnet, non-contact force, magnetic force, magnetic field, strength, bar magnet, ring magnet, button magnet, horseshoe magnet, attract, repel, magnetic material, north pole, south pole</p> <p><b><u>Lesson 4:</u></b> Can forces act at a distance?</p> <p><b><u>Objective:</u></b> Notice that some forces need contact between two objects, but magnetic forces can act at a distance.</p> <p><b><u>Vocabulary:</u></b> magnet, non-contact force, magnetic force, magnetic field, strength, bar magnet, ring magnet, button magnet, horseshoe magnet, attract, repel, magnetic material, north pole, south pole</p> <p><b><u>Lesson 5:</u></b> Do magnets always attract each other?</p> <p><b><u>Objective:</u></b> Predict whether two magnets will attract or repel each other, depending on which poles are facing.</p>	<p>cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)</p> <p><b><u>Vocabulary:</u></b> changing states, melting, freezing, evaporating, condensation, boiling point, melting point, temperature</p> <p><b><u>Lesson 4:</u></b> What are the changing states of water? (water cycle)</p> <p><b><u>Objective:</u></b> 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)</p> <p>Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature</p> <p><b><u>Vocabulary:</u></b> changing states, melting, freezing, evaporating, condensation, boiling point, temperature, water cycle</p> <p><b><u>Lesson 5:</u></b> Does temperature effect evaporation?</p> <p><b><u>Objective:</u></b> Observe that some materials</p>	<p><b><u>Vocabulary:</u></b> change of state, mixture, dissolve, soluble, solution, insoluble</p> <p><b><u>Lesson 3:</u></b> How can we separate materials?</p> <p><b><u>Objective:</u></b> Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.</p> <p><b><u>Vocabulary:</u></b> mixture, solution, sieve, filter, evaporating, separate</p> <p><b><u>Lesson 4:</u></b> Are all changes reversible?</p> <p><b><u>Objective:</u></b> Demonstrate that dissolving, mixing and changes of state are reversible changes.</p> <p>Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</p> <p><b><u>Vocabulary:</u></b> reversible, irreversible, burning, rusting, new material</p>	<p>including micro-organisms, plants and animals • Give reasons for classifying plants and animals based on specific characteristics.</p> <p><b><u>Vocabulary:</u></b> classification keys, properties, characteristics, tulips, daffodils</p> <p><b><u>Lesson 3:</u></b> What are the differences between groups in the plant Kingdom?</p> <p><b><u>Objective:</u></b> Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals • Give reasons for classifying plants and animals based on specific characteristics.</p> <p><b><u>Vocabulary:</u></b> classification, characteristics</p> <p><b><u>Lesson 4:</u></b> What are the broad groups of living things and how do these link to characteristics? (Vertebrae)</p> <p>Describe how living things are classified into broad groups according to common</p>
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<p>Describe magnets as having two poles.  <b><u>Vocabulary:</u></b>  magnet, non-contact force, magnetic force, magnetic field, strength, bar magnet, ring magnet, button magnet, horseshoe magnet, attract, repel, magnetic material, north pole, south pole</p>	<p>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.  <b><u>Vocabulary:</u></b> changing states, evaporating, boiling point, temperature</p>	<p><b><u>Lesson 5:</u></b> What are the uses of everyday materials?  <b><u>Objective:</u></b> Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic?  <b><u>Vocabulary:</u></b> uses, purpose, suitability</p> <p><b><u>Lesson 6:</u></b> Are some materials more suitable for certain objects?  <b><u>Objective:</u></b> Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.  <b><u>Vocabulary:</u></b> uses, purpose, suitability</p>	<p>observable characteristics and based on similarities and differences, including micro-organisms, plants and animals • Give reasons for classifying plants and animals based on specific characteristics.  <b><u>Vocabulary:</u></b> living things, characteristics, plants, animals, micro-organisms, bacteria, vertebrae, invertebrate,</p> <p><b><u>Lesson 5:</u></b> What are characteristics of invertebrates?  <b><u>Objective:</u></b> Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals • Give reasons for classifying plants and animals based on specific characteristics.  <b><u>Vocabulary:</u></b> insects, spiders, snails, worms. Characteristics, classify</p> <p><b><u>Lesson 6:</u></b> Classifying own imaginary animal  <b><u>Objective:</u></b> Give reasons for classifying</p>
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			plants and animals based on specific characteristics.
<p><u>How can we group rocks and soils and what can be found in them? (Chemistry)</u></p> <p><b>Lesson 1:</b> What rocks can we find in our local environment?</p> <p><b>Objective:</b> Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties</p> <p><b>Vocabulary:</b> rock, stone, pebble, boulder, gravel, limestone, chalk, slate, layers, hard, soft, grain, texture, appearance</p> <p><b>Lesson 2:</b> How can we classify rocks based on their properties?</p> <p><b>Objective:</b> Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties</p> <p><b>Vocabulary:</b> grain, hard, soft, density, durability, texture, absorb water</p>	<p><u>How can we classify living things and what is the impact of changes in environment on animals and their habitats? (Biology)</u></p> <p><b>Lesson 1:</b> How can we group living things into categories?</p> <p><b>Objective:</b> Recognise that living things can be grouped in a variety of ways</p> <p><b>Vocabulary:</b> habitats, 5 broad groups, classification, features, appearance</p> <p><b>Lesson 2:</b> How can we classify vertebrae?</p> <p><b>Objective:</b> 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</p> <p><b>Vocabulary:</b> classification keys,</p>	<p><u>How are forces present and important in everyday life? (Physics)</u></p> <p><b>Lesson 1:</b> What is gravity and how does it work?</p> <p><b>Objective:</b> Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</p> <p><b>Objective:</b> gravity, gravitational pull, force</p> <p><b>Lesson 2:</b> Can we measure gravity?</p> <p><b>Objective:</b> Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</p> <p><b>Vocabulary:</b> Weight, mass, newtons, grams, force, gravity, gravitational pull</p> <p><b>Lesson 3:</b> What is air resistance?</p> <p><b>Objective:</b> Identify the effects of air</p>	<p><u>How does light travel and what impact does this have? (Physics)</u></p> <p><b>Lesson 1:</b> How does light travel?</p> <p><b>Objective:</b> Recognise that light appears to travel in straight lines</p> <p><b>Vocabulary:</b> light, straight lines, rays</p> <p><b>Lesson 2:</b> How do we see non-light sources?</p> <p><b>Objective:</b> Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye. Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes</p> <p><b>Vocabulary:</b> light, reflected, eyes</p>



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<p>(porous), colour, smooth, rough, shape, size</p> <p><b><u>Lesson 3:</u></b> What is soil made of and are there different types?  <b><u>Objective:</u></b> Recognise that soils are made from rocks and organic matter  <b><u>Vocabulary:</u></b> soil, peat, compost, sandy, chalk, clay, plant/animal material (organic matter)</p> <p><b><u>Lesson 4:</u></b> How are fossils formed?  <b><u>Objective:</u></b> Describe in simple terms how fossils are formed when things that have lived are trapped within rock  <b><u>Vocabulary:</u></b> fossil, sediment, rock</p>	<p>classification, vertebrae, diets, 5 broad groups, features, closed questions</p> <p><b><u>Lesson 3:</u></b> How can we create our own classification keys?  <b><u>Objective:</u></b> Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment  <b><u>Vocabulary:</u></b> classification keys, classification, vertebrae, diets, 5 broad groups, features, closed questions</p> <p><b><u>Lesson 4:</u></b> What are positive and negative aspects for wildlife in our local area?  <b><u>Objective:</u></b> Recognise that environments can change and that this can sometimes pose dangers to living things.  <b><u>Vocabulary:</u></b> positive, negative, human impact, cause, habitats</p> <p><b><u>Lesson 5:</u></b> What are environmental changes and what impact do these changes have on living things?  <b><u>Objective:</u></b> Recognise that environments</p>	<p>resistance, water resistance and friction, that act between moving surfaces.  <b><u>Vocabulary:</u></b> air resistance, friction, force</p> <p><b><u>Lesson 4:</u></b> What is water resistance?  <b><u>Objective:</u></b> Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.  <b><u>Vocabulary:</u></b> water resistance, force, friction</p> <p><b><u>Lesson 5:</u></b> How do gears, levers and pulleys utilise forces?  <b><u>Objective:</u></b> Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.  <b><u>Vocabulary:</u></b> mechanisms, simple machines, levers, pulleys, gears, force</p>	<p><b><u>Lesson 3/4:</u></b> How can a shadows size be changed?  <b><u>Objective:</u></b> Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes  <b><u>Vocabulary:</u></b> shadows, distance, light source, transparent, opaque, translucent, outline</p> <p><b><u>Lesson 5:</u></b> Exploring the shape of shadows  <b><u>Objective:</u></b> Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes  <b><u>Vocabulary:</u></b> shadows, distance, light source, transparent, opaque, translucent, outline</p>
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	<p>can change and that this can sometimes pose dangers to living things.</p> <p><b>Vocabulary:</b> environment, habitat, positive, negative, migrate, natural disasters, urbanisation, littering, climate change</p>		
<p><u>Why is light so important and what do we know about the sun as a natural light source? (Physics)</u></p> <p><b>Lesson 1:</b> Can we see objects without light?</p> <p><b>Objective:</b> Recognise that they need light in order to see things and that dark is the absence of light</p> <p><b>Vocabulary:</b> light, light source, dark, absence of light, eyes</p> <p><b>Lesson 2:</b> What materials reflect light?</p> <p><b>Objective:</b> Notice that light is reflected from surfaces</p> <p><b>Vocabulary:</b> light, light source, dark, absence of light, reflect, shiny, matt, mirror</p>	<p><u>How are sound made and what are the patterns between different elements of sound? (Physics)</u></p> <p><b>Lesson 1:</b> How are sounds made?</p> <p><b>Objective:</b> Identify how sounds are made, associating some of them with something vibrating</p> <p><b>Vocabulary:</b> sound, vibration, sound wave, travel, medium, source, ears</p> <p><b>Lesson 2:</b> How do the vibrations from sound travel?</p> <p><b>Objective:</b> Recognise that vibrations from sounds travel through a medium in the ear</p> <p><b>Vocabulary:</b> sound, vibration, sound</p>	<p><u>How does our solar system move and how does this impact on us? (Physics)</u></p> <p><b>Lesson 1:</b> How does the Earth move compared to other planets?</p> <p><b>Objective:</b> Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. Describe the Sun, Earth and Moon as approximately spherical bodies.</p> <p><b>Vocabulary:</b> force, gravity, orbit, rotate, spherical, solar system, axis, Planets (Mercury, Jupiter, Saturn, Mars, Uranus, Neptune)</p> <p><b>Lesson 2:</b> How does the moon move in relation to Earth?</p> <p><b>Objective:</b> Describe the movement of the Moon relative to the Earth.</p>	<p><u>How do components vary in function when constructing circuits? (Physics)</u></p> <p><b>Lesson 1:</b> What symbols can be used to represent simple circuit components?</p> <p><b>Objective:</b> Use recognised symbols when representing a simple circuit in a diagram</p> <p><b>Vocabulary:</b> circuit, symbol, battery, bulb, buzzer, motor, switch</p> <p><b>Lesson 2:</b> Do circuits always work when connected?</p> <p><b>Objective:</b> Use recognised symbols when representing a simple circuit in a diagram</p> <p><b>Vocabulary:</b> complete circuit, circuit diagram, electrical current, closed, open</p> <p><b>Lesson 3 and 4 :</b> How does the voltage of cells impact on components in a</p>



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<p><b><u>Lesson 3:</u></b> How are shadows formed?  <b><u>Objective:</u></b> Recognise that shadows are formed when the light from a light source is blocked by an opaque object  <b><u>Vocabulary:</u></b> light, light source, dark, absence of light, shadow, sunlight, block, opaque</p> <p><b><u>Lesson 4:</u></b> What materials are opaque, transparent and translucent?  <b><u>Objective:</u></b> Recognise that shadows are formed when the light from a light source is blocked by an opaque object  <b><u>Vocabulary:</u></b> opaque, transparent, translucent, shadow</p> <p><b><u>Lesson 5:</u></b> What materials would be the most suitable for sunglasses?  <b><u>Objective:</u></b> Recognise that light from the sun can be dangerous and that there are ways to protect their eyes  <b><u>Vocabulary:</u></b> sunlight, dangerous, opaque, translucent, transparent, light, dark</p>	<p>wave, travel, medium, source, ears, solid, liquid, gas, faint, loud</p> <p><b><u>Lesson 3:</u></b> What are the patterns between a pitch of a sound and the features of an object?  <b><u>Objective:</u></b> Find patterns between the pitch of a sound and features of the object that produced it  <b><u>Vocabulary:</u></b> sound, vibration, sound wave, travel, medium, source, ears, pitch, features, low/high</p> <p><b><u>Lesson 4:</u></b> What are the patterns between the volume of a sound and the strength of the vibrations?  <b><u>Objective:</u></b> Find patterns between the pitch of a sound and features of the object that produced it  <b><u>Vocabulary:</u></b> sound, vibration, sound wave, travel, medium, source, ears, faint, loud, volume</p>	<p><b><u>Vocabulary:</u></b> force, gravity, orbit, rotate, spherical, solar system</p> <p><b><u>Lesson 3:</u></b> What makes day time and night time occur?  <b><u>Objective:</u></b> Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.  <b><u>Vocabulary:</u></b> day, night, block, light, absence of light, orbit, rotate</p> <p><b><u>Lesson 4:</u></b> How are shadows formed?  <b><u>Objective:</u></b> Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.  <b><u>Vocabulary:</u></b> shadow, earth, sun, block, rotate, orbit</p>	<p>circuit?  <b><u>Objective:</u></b> Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches</p> <p><b><u>Vocabulary:</u></b> circuit, complete circuit, cell, battery, bulb, buzzer, motor, switch, battery, voltage, brightness, volume</p>
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	<p><b>Lesson 5:</b> What happens when you get further away from a sound source?</p> <p><b>Objective:</b> Recognise that sounds get fainter as the distance from the sound source increases</p> <p><b>Vocabulary:</b> sound, vibration, sound wave, travel, medium, source, ears, faint, loud, volume, distance</p>	<p><b>Lesson 5:</b> Scientists who researched Earth and Space</p>	
<p><u>What is essential for animals including humans?</u></p> <p><b>Lesson 1:</b> What does nutrition mean and why is it so important?</p> <p><b>Objective:</b> 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</p> <p><b>Vocabulary:</b> nutrition, nutrients, healthy, carbohydrates, sugars, protein, vitamins, minerals, fibres, fat, bones, muscles</p>	<p><u>How can we interpret food chains and webs?</u></p> <p><u>What makes up the human digestive system? (Biology)</u></p> <p><b>Lesson 1:</b> How can we construct and interpret food chains?</p> <p><b>Objective:</b> Construct and interpret a variety of food chains, identifying producers, predators and prey</p> <p><b>Vocabulary:</b> construct, food chain, interpret, producers, predators, prey, energy, transfer</p>	<p><u>What are the differences in life cycles and life processes of living things? (Biology)</u></p> <p><b>Lesson 1:</b> Do all birds and insects have the same life cycle?</p> <p><b>Objective:</b> Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p> <p><b>Vocabulary:</b> life cycle, birds, insects, live young, metamorphosis, reproduce</p> <p><b>Lesson 2:</b> Do all mammals and amphibians have the same lifecycle?</p>	<p><u>How can your lifestyle impact on your circulatory system? (Biology)</u></p> <p><b>Lesson 1:</b> What are pulse rates?</p> <p><b>Objective:</b> Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function</p> <p><b>Vocabulary:</b> heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, circulatory system, exercise, diet, oxygen, lifestyle, muscles, carbon dioxide</p>





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<p><b>Lesson 2:</b> What nutrition is in our meals?</p> <p><b>Objective:</b> 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</p> <p><b>Vocabulary:</b> nutrition, nutrients, healthy, carbohydrates, sugars, protein, vitamins, minerals, fibres, fat, calories</p> <p><b>Lesson 3:</b> What makes up the human</p> <p><b>Objective:</b> Skelton and what is its functions? Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p> <p><b>Vocabulary:</b> bones (see lesson resource for list), skeleton, support, protect, move, skull, ribs, muscles, joints</p> <p><b>Lesson 4:</b> How does our skeleton move?</p> <p><b>Objective:</b> Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p>	<p><b>Lesson 2:</b> How can we construct and interpret food webs?</p> <p><b>Objective:</b> <i>Construct and interpret a variety of food chains, identifying producers, predators and prey.</i></p> <p><b>Vocabulary:</b> <i>construct, food chain, interpret, producers, predators, prey, energy, transfer</i></p> <p><b>Lesson 3:</b> What are the different types of human teeth and what are their functions?</p> <p><b>Objective:</b> Identify the different types of teeth in humans and their simple functions</p> <p><b>Vocabulary:</b> digestive mouth, mouth, teeth, saliva, incisor, canine, molar, premolars, chew, grind, cut, rip, swallow</p> <p><b>Lesson 4:</b> What are the key parts of our digestive system?</p> <p><b>Objective:</b> Describe the simple functions of the basic parts of the digestive system in humans.</p>	<p><b>Objective:</b> Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p> <p><b>Vocabulary:</b> life cycle, birds, insects, live young, reproduce, eggs</p> <p><b>Lesson 3:</b> Are there patterns between the life cycles of living things?</p> <p><b>Objective:</b> Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p> <p><b>Vocabulary:</b> life cycle, reproduce, offspring</p> <p><b>Lesson 4:</b> What are the stages in the life cycle of a flowering plant?</p> <p><b>Objective:</b> Describe the life process of reproduction in some plants and animals.</p> <p><b>Vocabulary:</b> life cycle, pollination, asexual, sexual, plantlets, runners, bulbs, cuttings, male/female parts of plants, wind, insects, reproduction</p>	<p><b>Lesson 2 and 3:</b> What are the main parts and functions of the human circulatory system?</p> <p><b>Objective:</b> Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</p> <p>Describe the ways in which nutrients and water are transported within animals, including humans.</p> <p><b>Vocabulary:</b> circulatory system, heart, pump, pulse, exercise, lungs, blood vessels, oxygen, carbon dioxide , nutrients, lifestyle, cycle, water, veins, artery</p> <p><b>Lesson 4:</b> What are the key parts of the human heart?</p> <p><b>Objective:</b> Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood</p>
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<p><b><u>Lesson 5:</u></b> Do animals have the same skeleton as humans?</p> <p><b><u>Objective:</u></b> Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p> <p><b><u>Vocabulary:</u></b> animals, skeleton, protect, support, move, joints, bones</p>	<p><b><u>Vocabulary:</u></b> digestive system, digestion, mouth, teeth, oesophagus, stomach, small intestine, large intestine, rectum, anus, nutrients, faeces, urine, absorb, sores, removed, acids, chemicals</p> <p><b><u>Lesson 5:</u></b> Creating a model of the human digestive system</p> <p><b><u>Objective:</u></b> Describe the simple functions of the basic parts of the digestive system in humans.</p> <p><b><u>Vocabulary:</u></b> Using all taught</p>	<p><b><u>How do humans develop to old age?</u></b></p> <p>Sarah Huggins- follows statutory guidance on puberty.</p> <p><b><u>Objective:</u></b> Describe the changes as humans develop to old age</p>	<p><b><u>Vocabulary:</u></b> chambers, walls, pulmonary, artery, aorta, veins, ventricle, atrium, blood (oxygenated/deoxygenated)</p> <p>Lesson 5: What can impact on our bodies function?</p> <p>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function</p>
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<p><u>What are the functions, requirements and lifecycles of plants? (Biology)</u></p> <p><b>Lesson 1:</b> What are the parts and functions of a flowering plant?</p> <p><b>Objective:</b> Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers,</p> <p><b>Vocabulary:</b> roots, stems/trunks, leaver, flower/blossom, pollen, function, photosynthesis</p> <p><b>Lesson 2:</b> (carries onto next lessons for observation purposes): What are the requirements of plants for life and growth?</p> <p><b>Objective:</b> 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</p> <p><b>Vocabulary:</b> air, light, nutrients, room, temperature, soil, conditions, requirements, growth , photosynthesis</p>	<p><u>What are circuits and how do they work? (Physics)</u></p> <p><b>Lesson 1:</b> What appliances run off electricity?</p> <p><b>Objective:</b> Identify common appliances that run on electricity.</p> <p><b>Vocabulary:</b> appliances, devices, plug in, batteries, mains, electrical</p> <p><b>Lesson 2:</b> What can be the parts of a simple circuit?</p> <p><b>Objective:</b> Identifying and naming a circuits basic parts, including cells, wires, bulbs, switches and buzzers.</p> <p><b>Vocabulary:</b> electrical circuit, complete circuit, component, cell, battery, bulb, crocodile clip, switch, buzzer, motor, wires</p> <p><b>Lesson 3:</b> Do circuits always work dependent on the location and position of the parts?</p> <p><b>Objective:</b> Construct a simple series electrical circuit.</p> <p>Identify whether or not a lamp will light</p>	<p><u>How do humans develop over age? (Biology)</u></p> <p><b>Lesson 1:</b> How do humans develop over age?</p> <p>Describe the changes as humans develop to old age.</p>	<p><u>How have living things adapted and changed over time? (Biology)</u></p> <p><b>Lesson 1 and 2:</b> How do living things adapt?</p> <p><b>Objective:</b> Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution</p> <p><b>Vocabulary:</b> adapt, adaptation, suites, environment, species, survive, evolution</p> <p><b>Lesson 3:</b> What would be the impact of living things not adapting?</p> <p><b>Objective:</b> Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution</p> <p><b>Vocabulary:</b> species, adapt, characteristics, suited, unsuited, risk, evolution, survive, conditions</p> <p><b>Lesson 4:</b> How have birds beaks evolved and what is the impact of this?</p> <p><b>Objectives:</b> Recognise that living things produce offspring of the same kind, but</p>
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## Key stage 2 Science National Curriculum coverage

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<p><b><u>Lesson 3:</u></b> Do plants needs vary?  <b><u>Vocabulary:</u></b> 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  <b><u>Vocabulary:</u></b> air, light, nutrients, room, temperature, soil, conditions, requirements, growth</p> <p><b><u>Lesson 4:</u></b> Does soil type impact on plant growth?  <b><u>Objective:</u></b> 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  <b><u>Vocabulary:</u></b> chalk/sand/clay soil, nutrients</p> <p><b><u>Lesson 5</u></b> (carries onto next lesson for observation purposes): How is water transported in plants?</p>	<p>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.  <b><u>Vocabulary:</u></b> electrical circuit, complete circuit, component, cell, battery, bulb, crocodile clip, switch, buzzer, motor, wires , loose connection, positive/negative, short circuit</p> <p><b><u>Lesson 4:</u></b> What are conductors and insulators?  <b><u>Objective:</u></b> Recognise some common conductors and insulators, and associate metals with being good conductors.  <b><u>Vocabulary:</u></b> conductors, insulators, electrical current, metals, non-metallic</p>		<p>normally offspring vary and are not identical to their parents.          Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.  <b><u>Vocabulary:</u></b> offspring, genetics, inherited, parents, adaptation, environment evolution</p> <p><b><u>Lesson 5:</u></b> Why are all living things not identical to their parents?  <b><u>Objective:</u></b> Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents  <b><u>Vocabulary:</u></b> offspring, genetics, inherited, parents, adaptation, DNA, environment evolution</p> <p><b><u>Lesson 6:</u></b> How do fossils provide information about living things millions of years ago?  <b><u>Objective:</u></b> Recognise that living things</p>
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## **Key stage 2 Science National Curriculum coverage**

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<p><b><u>Objective:</u></b> Investigate the way in which water is transported within plants</p> <p><b><u>Vocabulary:</u></b> roots, stem, petals, absorb, transport</p> <p><b><u>Lesson 6:</u></b> What is the life cycle of flowering plants?</p> <p><b><u>Objective:</u></b> Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal</p> <p><b><u>Vocabulary:</u></b> pollen, pollination, insect/wind pollination, seed formation, seed dispersal (wind/animal/water)</p>			<p>have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago</p> <p><b><u>Vocabulary:</u></b> fossils, species, evolution, characteristics</p>
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