



	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Mission Shaw	<p>Always use our growth mindset! Christian values Courage – to have a go, ask questions and pose answers. Thankfulness for the impact scientists throughout history have had on our existence. E.g. Invention of electricity, recycling etc. Friendship – work collaboratively with others. Wisdom – the wisdom shown by scientists Compassion for the sacrifices scientists have made to further understanding. Personal learning goals Concentrate, improve, imagine, work hard, understand others (how might their ideas be different to yours?), try new things, don't give up and push yourself.</p>						
Plants	<p>EYFS → Year 1 → Year 2 → Year 3 Observing plants → How do plants grow? → Making new plants. → How do plants reproduce?</p>						
	Basic lifecycles Being healthy Human body Life cycles	Name common plants and trees. Structure of plants: roots, stem, leaves and flowers. <i>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants, including trees.</i>	What do plants need to grow? Observing growth of seeds and bulbs into plants. Observe and describe how seeds and bulbs grow into mature plants. the main changes as seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. describe basic needs of plants for survival and the impact of changing these.	Functions of parts of the plant, requirements of plants for growth. Observe and describe how seeds and bulbs grow into mature plants. the main changes as seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. describe basic needs of plants for survival and the impact of changing these.			
Animals inc Humans	<p>EYFS → Year 1 → Year 2 → Year 3 → Year 4 → Year 5 → Year 6 All about me → How animals survive → Animal lifelines → Skeletons and movement → Digestion → Lifecycles → Circulation</p>						
	Talk about members of their immediate family and community. Name and describe people who are familiar to them. Recognise some environments that are different to the one in which they live.	Use key features to identify a variety of animals. Identify similarities and differences between animals. Name parts of the human body and associate it with the senses. Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals	Animal lifelines. Animals and their offspring. Basic needs of animals to survive. How humans can keep healthy. Notice that animals, including humans, have offspring which grow into adults.	Identify the different food groups – balanced diet. Function of muscles and skeleton. Notice that animals, including humans, have offspring which grow into adults.	Teeth, the digestive system and food chains Observe and describe how seeds and bulbs grow into mature plants.	changes as humans develop to old age, puberty Lifecycles I can describe the changes as humans develop to old age. can describe and compare different reproductive	Circulatory system including blood vessels to transport nutrients around the body, impact of diet exercise etc on our bodies I can identify and name the main parts of the human circulatory system, and describe the functions of the



		<p>Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>group animals according to what they eat.</p> <p><i>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</i></p> <p>describe and compare the observable features of animals from a range of groups.</p> <p>Identify, name, draw and label the basic parts of the human body.</p> <p>name and locate parts of the human body, including those related to the senses,</p> <p>Say which part of the body is associated with each sense.</p> <p>name and locate parts of the human body, including those related to the senses</p>	<p>the main changes as young animals, including humans, grow into adults.</p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).</p> <p>describe the basic needs of animals for survival.</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p>name and locate parts of the human body, including those related to the senses, and describe the importance of exercise, balanced diet and hygiene for humans.</p>	<p>the main changes as young animals, including humans, grow into adults.</p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).</p> <p>describe the basic needs of animals for survival.</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p>name and locate parts of the human body, including those related to the senses, and describe the importance of exercise, balanced diet and hygiene for humans.</p>	<p>the main changes as seeds and bulbs grow into mature plants.</p> <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p>describe basic needs of plants for survival and the impact of changing these.</p>	<p>processes and life cycles, in animals.</p> <p>I understand that all living things have lifecycles.</p> <p>can describe and compare different reproductive processes and life cycles, in animals.</p> <p>I can compare the different gestation periods of other animals with that of a human.</p> <p>can describe and compare different reproductive processes and life cycles, in animals.</p>	<p>heart, blood vessels and blood.</p> <p>name, locate and describe the functions of the main parts of the digestive, musculoskeletal, and circulatory systems, and can describe and compare different reproductive processes and life cycles, in animals.</p> <p>I can recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.</p> <p>describe the effects of diet, exercise, drugs and lifestyle on how their bodies function.</p> <p>I can describe the ways in which nutrients and water are transported within animals, including humans.</p> <p>name, locate and describe the functions of the main parts of the digestive, musculoskeletal, and circulatory systems, and can describe and compare different reproductive processes and life cycles, in animals.</p>
<p style="text-align: center;"> EYFS → Year 2 → Year 4 → Year 5 → Year 6 Where I live Habitats and how seasons affect them Classification and environmental impact Lifecycles Classification </p>							
<p>Living Things and their Habitats</p>	<p>Draw information from a simple map.</p> <p>Explore the natural world around them.</p> <p>Describe what they see, hear and feel whilst outside.</p> <p>Recognise some environments that are different to the one in which they live.</p>		<p>Living, dead, never been alive. Animals live in different habitats to which they are suited. Food chains.</p> <p>Notice that animals, including humans, have offspring which grow into adults.</p> <p>the main changes as young animals, including humans, grow into adults.</p>		<p>Classifying living things, use keys. Changing environments.</p> <p>Observe and describe how seeds and bulbs grow into mature plants.</p> <p>the main changes as seeds and bulbs grow into mature plants.</p> <p>Find out and describe how plants need water, light and</p>	<p>plant and animal life cycles, reproductive processes</p> <p>I can describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p> <p>can describe and compare different reproductive processes and life cycles, in animals.</p>	<p>Classification of living things based on characteristics</p> <p>I can 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</p>



			<p>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). <i>describe the basic needs of animals for survival.</i> Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. <i>name and locate parts of the human body, including those related to the senses, and describe the importance of exercise, balanced diet and hygiene for humans.</i></p>		<p>a suitable temperature to grow and stay healthy. describe basic needs of plants for survival and the impact of changing these.</p>	<p>I can describe the life process of reproduction in some plants from different habitats, comparing the reproductive process of using different parts of the parent plant eg. Tubers, bulbs, runners, seeds, root and stem cuttings. name, locate and describe the functions of the main parts of plants, including those involved in reproduction I can compare lifecycles of different animals from different habitats and historical times. can describe and compare different reproductive processes and life cycles, in animals. Know about the work of different naturalists eg. David Attenborough and Jane Goodall.</p>	<p><i>use the observable features of plants, animals and micro-organisms to group, classify and identify them into broad groups, using keys or in other ways</i> I can give reasons for classifying plants and animals based on specific characteristics. <i>use the observable features of plants, animals and micro-organisms to group, classify and identify them into broad groups, using keys or in other ways</i></p>
			<p>Year 3 Year 6 Rocks and Fossils Evolution and Natural Selection</p>				
<p>Evolution and Inheritance</p>							<p>The fossil record. Evolution in terms of inheriting characteristics from parents. Importance of time and adaptation. I can recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago <i>use the basic ideas of inheritance, variation and adaptation to describe how living things have changed over time and evolved; and describe how fossils are</i></p>



		<p><u>formed and provide evidence for evolution.</u> I can recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents <i>use the basic ideas of inheritance, variation and adaptation to describe how living things have changed over time and evolved;</i> I can identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. <u>explain how environmental changes may have an impact on living things.</u></p>	
Rocks		<p>Year 3 → Year 6 Rocks and Fossils → Evolution and Natural Selection</p>	
		<p>Appearance and properties of different rocks. Composition of soils, fossil formation</p> <p>Observe and describe how seeds and bulbs grow into mature plants. the main changes as seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. describe basic needs of plants for survival and the impact of changing these.</p>	
Materials	<p>EYFS → Year 1 → Year 2 → Year 3 → Year 4 → Year 4 → Year 5 Exploring objects → What are materials? → Materials and their properties → Soil, rocks and fossils → Solids, liquids and gases → Mixtures → Making new substances</p>		



	<p>Name some simple materials Describe materials simply Explore ice and how water changes to ice and back</p>	<p>Name some objects and state what they are made of. Identify properties of materials and sort accordingly.</p> <p>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants, including trees.</p>	<p>Suitability of an object for its purpose based on properties. How the shape of some solid objects can be changed.</p> <p>Notice that animals, including humans, have offspring which grow into adults. <i>the main changes as young animals, including humans, grow into adults.</i> Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). <i>describe the basic needs of animals for survival.</i> Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. <i>name and locate parts of the human body, including those related to the senses, and describe the importance of exercise, balanced diet and hygiene for humans.</i></p>		<p>properties of materials, separating, dissolving, reversible and non-reversible</p> <p>I can 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 <i>group and identify materials, including rocks, in different ways according to their properties, based on first-hand observation; and justify the use of different everyday materials for different uses, based on their properties.</i> I know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution <i>identify, and describe what happens when dissolving occurs in everyday situations; and describe how to separate mixtures and solutions into their components.</i> I can use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating <i>identify, and describe what happens when dissolving occurs in everyday situations; and describe how to separate mixtures and solutions into their components.</i> I can give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday</p>	
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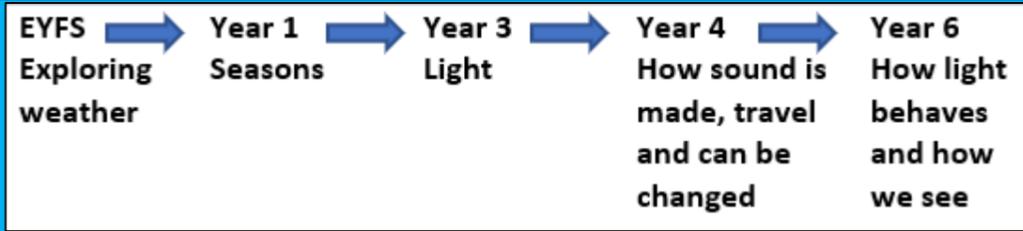
					<p>materials, including metals, wood and plastic <i>justify the use of different everyday materials for different uses, based on their properties.</i> Demonstrate that dissolving, mixing and changes of state are reversible changes. <i>identify, with reasons, whether changes in materials are reversible or not.</i> 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. <i>identify, with reasons, whether changes in materials are reversible or not.</i></p>		
States of Matter	<p>EYFS → Year 1 → Year 2 → Year 3 → Year 4 → Year 4 → Year 5 Exploring objects What are materials? Materials and their properties Soil, rocks and fossils Solids, liquids and gases Mixtures Making new substances</p>						
					<p>Solids / liquids / gases – properties of these. Changes of state (melting and freezing) and the water cycle (evaporation and condensation) measuring temperature. Observe and describe how seeds and bulbs grow into mature plants. the main changes as seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. describe basic needs of plants for survival and the impact of changing these.</p>		



		EYFS → Year 1 → Year 5 Exploring weather Seasons Earth and Space		EYFS → Year 1 → Year 3 → Year 4 → Year 6 Exploring weather Seasons Light How sound is made, travel and can be changed How light behaves and how we see	
Seasonal Changes	Exploring weather connected with the seasons. Explore the natural world around them. • Describe what they see, hear and feel whilst outside. • Understand the effect of changing seasons on the natural world around them.	Observe and describe four seasons. Look at weather and day length and impact of this on people and animals/plants			
		Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants, including trees.			
		EYFS → Year 3 → Year 5 Observing the world Magnets, pushes and pulls Forces that oppose motion			
Forces	Explore pushing pulling		A force is a push or a pull. Movement of objects on different surfaces. Behaviour of magnets and magnetic materials.		effect of air and water resistance, friction, gravity, simple mechanisms
			Observe and describe how seeds and bulbs grow into mature plants. the main changes as seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. - describe basic needs of plants for survival and the impact of changing these.		I can 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 <u>group and identify materials, including rocks, in different ways according to their properties, based on first-hand observation; and justify the use of different everyday materials for different uses, based on their properties.</u> I know that some materials will dissolve in liquid to form a solution, and describe how



					<p>to recover a substance from a solution identify, and describe what happens when dissolving occurs in everyday situations; and describe how to separate mixtures and solutions into their components.</p> <p>I can use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating identify, and describe what happens when dissolving occurs in everyday situations; and describe how to separate mixtures and solutions into their components.</p> <p>I can give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic justify the use of different everyday materials for different uses, based on their properties.</p> <p>Demonstrate that dissolving, mixing and changes of state are reversible changes. identify, with reasons, whether changes in materials are reversible or not.</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. identify, with reasons, whether changes in materials are reversible or not.</p>	
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Light	Explore the natural world around them. Describe what they see, hear and feel whilst outside. Exploring dark and light places Torches make light Light changes colour with coloured sheets		We need light to see. Reflections. Shadow formation and patterns in shadow size.		Light travels in straight lines. We see because light enters our eyes. Shadows are the same shape as the outline shape of the object. I can recognise that light appears to travel in straight lines <i>use the idea that light from light sources, or reflected light, travels in straight lines and enters our eyes to explain how we see objects, and the formation, shape and size of shadows.</i> I can 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 <i>use the idea that light from light sources, or reflected light, travels in straight lines and enters our eyes to explain how we see objects, and the formation, shape and size of shadows.</i> I can 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 <i>use the idea that light from light sources, or reflected light, travels in straight lines and enters our eyes to explain how we see objects, and the formation, shape and size of shadows.</i> I can use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.
			Observe and describe how seeds and bulbs grow into mature plants. the main changes as seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. describe basic needs of plants for survival and the impact of changing these.		



					use the idea that light from light sources, or <u>reflected light</u> , travels in straight lines and enters our eyes to explain how we see objects, and <u>the formation, shape and size of shadows</u> .
	<p>EYFS → Year 1 → Year 3 → Year 4 → Year 6</p> <p>Exploring weather Seasons Light How sound is made, travel and can be changed How light behaves and how we see</p>				
Sound	Describe what they see, hear and feel whilst outside. Experiment with different musical instruments, voice and body percussion			<p>Sounds are made by vibrating objects Sounds travel through materials. Sounds can be high / low (pitch) loud / quiet (volume)</p>	
				<p>Observe and describe how seeds and bulbs grow into mature plants. the main changes as seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. describe basic needs of plants for survival and the impact of changing these.</p>	
Electricity	<p>EYFS → Year 4 → Year 6</p> <p>Turn it on turn it off. Making electrical circuits work Controlling electrical circuits</p>				
	Explore how things work. Electricity makes things work. Safety			<p>Name some electrical appliances. Investigate simple circuits. Recognise electrical conductors and insulators</p>	Understand the effect of increasing the number of batteries or voltage of battery on components in a circuit. Use symbols when drawing diagrams.
				Observe and describe how seeds and bulbs grow into mature plants.	I can associate the brightness of a lamp or the volume of a buzzer with the



			<p>the main changes as seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. describe basic needs of plants for survival and the impact of changing these.</p>	<p>number and voltage of cells used in the circuit. <u>use simple apparatus to construct and control a series circuit, and describe how the circuit may be affected when changes are made to it</u> I can 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. <u>use simple apparatus to construct and control a series circuit, and describe how the circuit may be affected when changes are made to it</u> I can use recognised symbols when representing a simple circuit in a diagram. <u>use recognised symbols to represent simple series circuit diagrams.</u></p>
<p>EYFS → Year 1 → Year 5 Exploring weather Seasons Earth and Space</p>				
<p>Earth and Space</p>	<p>Explore the concept of space through story Know that we have landed on the Moon</p>		<p>relative movement of Earth, Moon and planets around Sun, Earth's rotation to explain day/night and apparent movement of sun I can 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 <u>group and identify materials, including rocks, in different ways according to their properties, based on first-hand observation; and justify the use of different</u></p>	



everyday materials for different uses, based on their properties.

I know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution

identify, and describe what happens when dissolving occurs in everyday situations; and describe how to separate mixtures and solutions into their components.

I can use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating

identify, and describe what happens when dissolving occurs in everyday situations; and describe how to separate mixtures and solutions into their components.

I can give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic

justify the use of different everyday materials for different uses, based on their properties.

Demonstrate that dissolving, mixing and changes of state are reversible changes.

identify, with reasons, whether changes in materials are reversible or not.

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. <i>identify, with reasons, whether changes in materials are reversible or not.</i>	
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