

## Whole School Science Curriculum

	<b>Components:</b>						<b>Composite:</b>
<b>Year 1</b> <i>Term 1 &amp; 2</i>  Everyday materials	What materials are these objects made from?	What properties do materials have?	What material is best at absorbing water?	What material is best at keeping us dry/is waterproof?			What are the physical properties of everyday materials and how can we group them?
<b>Year 1</b> <i>Term 3 &amp; 4</i>  Animals including humans	What parts make up the human body?	What parts of the body do we need to see, hear, taste, smell and touch??	What is an animal?	How can we group animals?	Do all animals eat the same things?		What makes up the human body? How can we group animals?
<b>Year 1</b> <i>Term 5 &amp; 6</i>  Plants	What plants do we know and where can we find them?	What part of a plant is underground?	Can we use a flower to name a plant?	Are all tree trunks the same?	What are the leaves like on different trees?		What is the basic structure of plants and how can we group them?
<b>Year 1</b> <i>Through the year</i> Seasonal changes	What is our local area like in each season?	Are days always the same length?	Is the weather always the same here?				What are the changes throughout the seasons?
<b>Year 2</b> <i>Term 1&amp;2</i>  Living things and their habitats	What examples can I find of living things, things that are no longer alive, and things that have never been alive?	What microhabitats can we find in our school?	Do plants need particular habitats too?	How do different habitats provide for the basic needs of different animals and plants?	How do animals obtain food from other animals and plants?		What is the difference between living things, dead things, and things that have never been alive? What are the basic needs of living things and how do they get their food?
<b>Year 2</b> <i>Term 2</i>	What do we know about every day materials?	Which material is best?	How well do different	Can solid objects change shape?	What fabric is the stretchiest?		How are common everyday materials

Everyday materials			materials bounce?				suitable? How can we change the shape of solid objects?
<b>Year 2</b> <i>Term 3</i> Animals including humans	How do animals change as they get older?	Do human body parts change with age?	What do animals need to survive?	Why should humans exercise?	Why do we eat different types food?		What is the lifecycle of a human and what are the basic needs of animals?
<b>Year 2</b> <i>Term 5 &amp; 6</i> Plants	What do plants grow from?	How do bulbs and seeds grow?	What does a seed need to grow?	What does a plant need to stay healthy?	What is the lifecycle of the plant?		What do plants need to stay healthy?
<b>Year 3</b> <i>Term 1 &amp; 2</i> Forces & magnets	What is a contact force?	How do different surfaces affect the movement of objects?	What is a magnet and how do they work?	What materials are attracted to a magnet?	Do all magnets have the same strength?		What are forces and what affects them? What are magnets?
<b>Year 3</b> <i>Term 3</i> Light	Can we see without light?	How does light behave when it is reflected?	Can we change how shadows are formed?	How can we protect our eyes from the sun?	Do shadows stay the same all day?		What is light and what are shadows?
<b>Year 3</b> <i>Term 4</i> Rocks	What is rock and how can it be grouped?	How were rocks formed?	Why are different rocks suited for different purposes?	How are fossils made?	What is soil and how is it made?		How are fossils formed? How can we group rocks?
<b>Year 3</b> <i>Term 5</i> Plants	How are seeds dispersed?	What are the main functions of different parts of a flowering plant?	How do plants make food and how is water transported?	Do all plants need the same things to stay alive?	Why does a plant need flowers?		What are the requirements for plant growth and life, and how does it function?
<b>Year 3</b> <i>Term 6</i> Animals including humans	What food do humans need?	How can we keep our pets healthy?	Why do humans need a skeleton?	How do muscles work?	Do people who do more physical activity have stronger muscles?		What do humans need for support, protection an movement?

<b>Year 4</b> <i>Term 1 &amp; 2</i>  Sound	How do we hear sounds?	What patterns can you find between the strength of vibrations and volume of sound?	What happens to sound as the distance from the sound sources increases?	What material provides the best insulation against sound?	How do the features of an object affect the pitch of the sound it makes?		What is sound?
<b>Year 4</b> <i>Term 3</i>  States of matter	How many states of matter are there?	Can temperature change the state of an object?	Can all liquids be frozen to become solids?	What are the stages of the water cycle?	Does temperature/location affect rates of evaporation?		What are states of matter and where can we see them in everyday life?
<b>Year 4</b> <i>Term 4</i>  Electricity	Where does electricity come from and what is it used for?	How can we light a bulb using a simple, series electrical circuit?	How does a simple switch work?	What material is the best conductor of electricity?	What components are needed to make a working circuit?		What do we need to create a working circuit?
<b>Year 4</b> <i>Term 5</i>  Animals including humans	Why do we have different shaped teeth?	What can we tell about an animal from looking at its teeth?	What happens to our food when we eat it?	Can models help us understand human processes?	Why are food chains important?		What is the digestive system? What are the different types of teeth?
<b>Year 4</b> <i>Term 6</i>  Living things and their habitats	Is it helpful to group living things?	What types of plants and animals live in the local area?	What is special about our local environment?	What dangers are posed to habitats and the environment?	How can we develop the local area to protect living things?		How can we group living things in different ways? How do environments change?
<b>Year 5</b> <i>Term 1</i>  Animals including humans	How do humans change over time?	How can we investigate changes as we progress through the lifecycle?	What happens to us during puberty?	How can the size of animals including humans tell us about gestation periods?			What does the lifecycle of a human look like?
<b>Year 5</b> <i>Term 2</i>  Earth and Space	How does our position in the solar system impact life on Earth?	Does anything else orbit the sun?	How do we get night and day?	How can shadows show us that the Earth is rotating?			How does the Earth, other planets and moon move, and what impact does it

							have on it's inhabitants?
<b>Year 5</b> <i>Term 3 &amp; 4</i>  Forces	How does friction affect the amount of force required to move an object?	What is gravity?	How does air resistance affect the speed at which an object falls?	What changes the effects of water resistance?	What impact do gears, levers and pulleys have on forces?		What different forces are there, and what is their effect?
<b>Year 5</b> <i>Term 5</i>  Properties and changes of materials	What material is most effective in keeping a cup of tea warm?	What materials make the best thermal insulators?	When we change a material, is it always forever?	How can we separate a mixture?	When does a change make a new material?		What are the changes in states, and how can we change them back?
<b>Year 5</b> <i>Term 6</i>  Living things and their habitats	Are there any differences between the lifecycles of mammals, amphibians, insects and birds?	How can we behave like naturalists?	What is sexual reproduction in plants?	Can plants reproduce without seeds?	Do all animals reproduce in the same way?		What are the differences in lifecycles of living things?
<b>Year 6</b> <i>Term 1</i>  Living things and their habitats	Is the classification of animals helpful?	Are there many similarities between the animals in the local area?	How can plants be classified?	Is there a link between plant groups and the environment they grow in?	Do micro-organisms matter?		Why is classifying living things useful?
<b>Year 6</b> <i>Term 2</i>  Evolution and Inheritance	How do scientists know that living things have changed over time?	How does variation explain the different features and characteristics of living things?	How has variation led to evolution?	Do all living things adapt in the same way?	How have plants in the local area adapted?		What is evolution and inheritance?
<b>Year 6</b> <i>Term 3</i>  Electricity	How can we represent a single circuit in a diagram?	How does the number of batteries affect the brightness of a bulb?	What else impacts the brightness of a bulb in a circuit?	What can affect the function of a component in a circuit?	How can I use my knowledge of electrical components to make a device?		How do components in electrical circuits function, and what affects them?
<b>Year 6</b> <i>Term 4</i>	How does light travel?	Is a shadow always the same shape as the	How does a mirror reflect light?	What is refraction and why is it a phenomenon?	What colour is light? Is this a phenomenon?		What impact does light travelling in straight lines

Light		object that casts it?					have, and does this ever change?
<b>Year 6</b> <i>Term 5 &amp; 6</i>  Animals including humans	What is the purpose of the circulatory system?	Why is blood so important?	How does exercise affect our circulatory system?	How are nutrients and water transported within animals, including humans?	How do diet, exercise, drugs and lifestyle impact our bodies?		What is the human circulatory system?