

Brookside School - Long Term Plan - Science Cycle 1  
(Refer to subject progression documents for a more in-depth overview)

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	<b>Seasonal Change</b> How does it become dark at night and light in the day? Identify how the Earth orbits the sun and this causes day and night.  **Seasonal change is visited throughout the year.	<b>Everyday Materials</b> How are materials different? What can we use hard or soft materials for? Investigate materials in their environments and describe similarities and differences.	<b>Lifecycle and plants</b> How are plants similar and different? What is a lifecycle? Observe and investigated the similarities and differences of plants and animals. Discuss the life cycle of an animal.  <b>Seasonal Change</b> How does the weather change from autumn to winter and winter to spring?		Living things Woodland animals and animal habitats Observe living things in immediate environment and discuss the similarities and differences.  <b>Seasonal Change</b> How does the weather change from spring to summer?	
Year 1/2	<b>Everyday Materials</b> What are the advantages and disadvantages of some materials? Identify and group materials based on their properties.	<b>Everyday Materials</b> How can I choose what materials to use for a purpose? Investigate which materials are best for a specific purpose.	<b>Living things and their habitats inc plants</b> How do we know is something is dead or alive? Investigate and explain how we know if something is alive or dead.	<b>Living things and their habitats inc plants</b> How are habitats suitable for different animals? Identify why an animal or plants is best suited to its habitat.	<b>Seasonal Change</b> Why is weather different in different seasons? Explain when the weather is cold/warm and how this impacts living things.	<b>Animals, including humans</b> What do animals need to survive? Why do we need to keep healthy? Identify factors helping animals survive and compare to humans.
Year 3/4	<b>Teeth and Digestion</b> What is the purpose of the digestive system? How can we protect our teeth? Identify the names of the digestive organs and teeth and their functions.	<b>Teeth and Digestion</b> Can I identify the type of animal by its teeth? What is a food chain? To understand what a food chain is and to identify and construct them.	<b>Electricity</b> How do we use electricity in everyday life? Why do we need electricity? Identify and investigate how we use electricity and how it is created.	<b>Electricity</b> How can I use electricity to power a circuit? Investigate how to use electricity to power different components.	<b>Forces and Magnets</b> How can I change the speed of a force? How do we use magnets in everyday life? Investigate friction and the impact on a force. Investigate how magnets work.	<b>Plants</b> How do plants function? Investigate what plants need to survive. Identify the lifecycle of a plant in detail through pollination, seed formation and seed dispersal.
Year 5/6	<b>Living things and their habitats</b> How can we classify insects, birds and plants? Investigate how to classify various living things and to also identify then using a classification key.	<b>Animals, including humans</b> What is involved in the human circulatory system and what are their functions? How does our lifestyle impact our bodies? Investigate how the choices we make in our lifestyle impact on our body.	<b>Evolution and inheritance</b> How have living things changed over time? How are offspring similar and different to their parents? Investigate how living things have changed over a period of time. Observe and describe how offspring are different to their parents.	<b>Light</b> How can we see light? Can we bend light, or does it always travel in a straight line? Investigate how light travels in straight lines. Investigate how we see light.	<b>Electricity</b> How do we use symbols to represent a circuit? How can I alter a circuit to make some components work better? Identify different symbols that represent the parts of a circuit to draw a diagram. Investigate how circuits can be changed.	<b>Electricity</b> How can I create a circuit for a purpose? How does voltage affect the circuit? Investigate how a change in voltage affects a circuit. Investigate how to create a circuit for a purpose such as an alarm.



**Brookside School - Long Term Plan - Science Cycle 2**  
(Refer to subject progression documents for a more in-depth overview)

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	<b>Seasonal Change</b> How does it become dark at night and light in the day? Identify how the Earth orbits the sun and this causes day and night.  **Seasonal change is visited throughout the year.	<b>Everyday Materials</b> How are materials different? What can we use hard or soft materials for? Investigate materials in their environments and describe similarities and differences.	<b>Lifecycle and plants</b> How are plants similar and different? What is a lifecycle? Observe and investigated the similarities and differences of plants and animals. Discuss the life cycle of an animal.  <b>Seasonal Change</b> How does the weather change from autumn to winter and winter to spring?		Living things Woodland animals and animal habitats Observe living things in immediate environment and discuss the similarities and differences.  <b>Seasonal Change</b> How does the weather change from spring to summer?	
Year 1/2	<b>Everyday Materials</b> How can I group materials based on their properties? Identify a variety of objects by their material, group them based on their properties.	<b>Seasonal change</b> Why is the weather different in different parts of the year? Describe the weather in different parts of the year and understand the key features of each season.	<b>Animals, including humans</b> What is the difference between a variety of animals? What are the names given to different animals? Identify similarities and differences of animals.	<b>Animals, including humans</b> What are the senses and which parts of our body do they associate with? Identify the different body parts that link to the senses and name offspring that matches the adult.	<b>Plants</b> How can I identify a tree by its leaf? What are the parts of a plant? Investigate different leaves linking to trees. Name 4 different parts of a plant. Link to Cycle 1 Spring 1/2.	<b>Plants</b> How do bulbs and seeds grow into plants? What do plants need to grow? Observe and investigate how seeds and bulbs grow into plants. Identify what plants need to grow.
Year 3/4	<b>Light</b> Why do we need light to see? How are shadows created? Recognise that we need light to see and it is reflected off surfaces. Investigate how shadows are created.	<b>Nutrition and growth</b> Why do animals and humans need nutrition? What are the functions of our skeletons and muscles? Identify why animals and humans need nutrition and investigate the function of our bodies.	<b>Rocks</b> How are rocks similar and different? Investigate different rocks based on their appearance and properties. Understand that soils are made from rocks and organic matter.	<b>States of matter</b> What is a solid, liquid or gas? How can I turn a liquid into a solid? Identify different states of matter. Conduct experiments of changing the states. Look at the water cycle.	<b>Sound</b> How is a sound created? How can sound become louder or quieter? Understand that sounds are vibrations that travel through a medium to the ear. Investigate loud and quiet sounds.	<b>Living things and their habitats</b> How can we group living things? What is a classification key and how can I use it? Group living things together, use classification keys to identify animals.
Year 5/6	<b>Forces</b> How does a force work? Investigate what a force is and how it works, link to the Earth and gravity.	<b>Earth and Space</b> How does Earth move? What affect does the moon have on Earth? Identify how the Earth orbits the sun and the moon orbits the Earth. Investigate how the moon affects the Earth.	<b>Properties and changes of materials</b> How are everyday materials similar and different? Investigate how a variety of everyday materials can be grouped together based on their properties.	<b>Properties and changes of materials</b> Can mixtures be separated? Are all changes reversible? Identify and investigate how to split mixtures based on knowledge of solids, liquids and gasses. Investigate changes of state.	<b>Living things and their habitats</b> Do life cycles differ in mammals, amphibians, insects and birds? Investigate how life cycles are similar and different in mammals, amphibians, insects and birds.	<b>Animals, including humans</b> How do our bodies change throughout childhood and adulthood? Identify physical changes of the body throughout childhood to adulthood.