Science curriculum overview

	Autumn	Spring	Summer
Nursery	**Dear Zoo/Old macDonald** What are the similarities and differences between animals? **Planting bulbs -** How do they change? **Autumn -** What do pumpkins look like inside?	**Winter** How do the seasons affect the outside area? Freezing plants in water, how has the water changed? Will it turn back to water? **Science week** A range of activities based on the theme of the year	**Under the sea** Which animals can we see under the water? How are they different from the zoo and farm animals? **Growing** Plant seeds - how do they change? **Minibeasts** Identify minibeasts in the environment - what do they look like?
Reception	**Growing up** How do we change when we grow up? **Woodland animals** What does nocturnal mean? **Light and dark** What is the difference between light and dark?	**Polar habitats** What is a polar region like? **Space** What do we see when we look up? **Healthy eating** What do we need to keep our bodies healthy?	**Lifecycles & growing** How do animals change as they grow? **Under the sea** What is an underwater habitat like?
Year 1	**Animals, including humans** What are the different parts of the human body called and how are they linked to our senses? **Everyday materials** How can we identify and sort materials?	**Animals, including humans** How might the features of different animals help them? **Plants** How many different wild and garden plants can you recognise and name? How would you describe the structure of a plant?	**Animals, including humans** How many animals can you describe (including fish, amphibians, reptiles, birds and mammals)? How would you group and compare these? **Investigation Observing, measuring and recording** What can we investigate? Earthworms
Seasonal changes This will be flexible across the year so that children can get the real-life experiences of the seasons. (1 week every half term) How does the weather and the length of the day change across the four seasons?			

Year 2	**Living things and their habitats** How do you identify if something is alive, dead or inanimate? How are different plants and animals suited to their habitats and microhabitats? **Uses of Everyday materials** How can you compare the suitability of different materials for different jobs? How can you change the shape of solid objects?	**Animals, including humans** How can a 'food chain' show how animals obtain their food? How do animals change from infants to adults? **Animals, including humans** How can a 'food chain' show how animals obtain their food? How do animals change from infants to adults?	**Plants** What do plants need to survive and thrive? How would you explain the life cycle of a plant and the changes that occur? **Investigation Observing, measuring and recording** Do bigger seeds take longer to germinate than smaller seeds?
Year 3	**Animals, including humans** What do animals need to survive and thrive? How do animals obtain and use the nutrition found in food? **Rocks** How can rocks be compared and classified? How are fossils formed? What is soil made from?	**Plants** How do flowering plants reproduce? How is water transported around plants? **Forces and magnets** How do things move on different surfaces? What materials are attracted or repelled by magnets? How would you describe a magnet and magnetic force?	**Light and Shadows** Where does light come from and why do we need it? Why is light from the sun dangerous and how can we protect our eyes? How are shadows made and changed? **Investigation Observing, measuring and recording** Are all magnets the same?
Year 4	**States of Matter** What are the differences between solids, liquids and gasses and how can temperature affect each one? What processes are there in the water cycle? What factors might affect these processes? **Electricity** How are electrical circuits built and what factors affect whether they work? How do electrical conductors and insulators work?	**Animals, including humans** What different types of teeth do humans have and what are their functions? What are the main parts of the digestive system? How can a 'food chain' show the flow of energy between animals? **Habitats** How are classification keys used to group living things? Do environments change and what dangers might this pose to living things?	**Sound** How are sounds made and how do they travel? How can pitch and volume be changed? **Investigation Observing, measuring and recording** Why should we use toothpaste?
Year 5	**Forces** How can you describe the impact of gravity? How does air and water resistance affect the movement of objects? How do levers, pulleys and gears affect forces? **Properties and changes of materials** How can you select materials for different	**Earth & space** How do the planets in our solar system and our moon move in relation to the sun? What causes day and night at different times across our planet? **Living things & their habitats** What are the differences in the life process	**Animals Including Humans** What changes occur in humans from birth to old age? **Investigation Observing, measuring and recording** What can we investigate? Materials and changing properties

	purposes based upon their properties? How do you use mixtures and solutions to explain reversible and irreversible changes?	of reproduction between animals and plants?	
Year 6	**Electricity** How are series circuits constructed and represented using scientific symbols? **Light** How does light enter our eyes and enable us to see? What factors can affect our vision and how can it be improved?	**Animals Including Humans** What are the main parts and functions of the human circulatory system? How does our lifestyle affect the way our bodies function? How are nutrients and water transported around our bodies? **Evolution and inheritance** How have living things evolved over Earth's history? What part does genetics play in variation and inheritance? What evidence is there for the theory of evolution?	**Living things & their habitats** How are living things classified? What specific characteristics can be used for classifying living things? **Investigation Observing, measuring and recording** What will we investigate? Heart rate recovery