

Cedars Manor School

Science Curriculum Overview

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	Investigating using our senses What can we smell? What can we taste? What can we hear? What can we see? What can we feel?	Light and Dark – Night and Day What can we see during the day? What can we see at night?	Simple ‘Magic’ science experiments What happens when we mix ingredients together?	Life Cycles of chicks & beans How does a chick grow? How can we care for a bean plant?	Floating and Sinking What objects float? What objects sink? What is heavy? What is light?	Hot & Cold How do we make something hot? How do we make something cold? What natural objects are hot or cold?
Reception	Fossils What are fossils? Where did fossils come from? How can we find fossils? Who looks at fossils?	Light and Dark - Shadows What causes shadows? When can I see shadows?	Magnetism / Simple forces How does magnetism work? What happens when magnets attract objects? What happens when magnets repel objects?	Life Cycles of Butterflies & Frogs How does a butterfly grow? How do frogs grow and change? How can we care for insects?	Solids and Liquids (Freezing and melting) What happens when things freeze? What happens when things melt? Are things that are melted always hot?	My Body – Healthy Me How can I keep my body healthy? Why is healthy food important? Why is exercise important?
1	Understanding our World Continuous Provision	Everyday Materials What properties do materials have? How do we use different materials?	The Seasonal Changes How does the weather change during the year? How do the seasons affect animals?	Amazing Animals Can we group animals into mammals, birds, and fish? What do mammals have in common? What do animals eat?	The Seasonal Changes How does the weather change during the year? How do the seasons affect animals?	Plants What is a plant? How do plants grow? Why are plants important?
2	Uses of Materials Can we identify the materials that different objects are made from? Can we compare the suitability of different materials? How can we help to stop plastic pollution? How are new materials discovered?	Animals and Survival What do animals need to survive? How do animals change as they grow up? Why is exercise important? What is a balanced diet? What is hygiene and why is it important?	Habitats Things can be living, dead, or never been alive. Plants and animals live in a variety of habitats, including microhabitats. Animals obtain their food from plants and other animals.		Protecting the Environment Can we explain the dangers to the local environment and the animals in it? Why is recycling important? What difference can I make at home and at school?	Plants and Growth What is inside a seed? What does a seed need to germinate? What is the life cycle of a plant?
3	Skeletons, muscles and nutrition	Rocks and Fossils	Light and Shadows What is a light source?		Need for survival	Forces and Magnets What are forces?

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	<p>What does the human skeleton look like?</p> <p>How are skeletons different in animals?</p> <p>How do different animals get the nutrition they need?</p>	<p>What are different types of rock?</p> <p>What are different types of rock?</p> <p>What are fossils and how are they formed?</p>	<p>How does light travel?</p> <p>How can we vary the size and position of shadows?</p> <p>What types of materials reflect light?</p> <p>What types of materials reflect light?</p>	<p>What does a plant need to grow?</p> <p>Why do plants have leaves?</p> <p>What is the life cycle of a flowering plant?</p>	<p>What is a magnet and how do magnets behave?</p> <p>Which materials are magnetic?</p> <p>How are magnets used in real-life situations?</p>
4	<p>Teeth and Digestion</p> <p>What do human teeth look like?</p> <p>Do all animals have the same teeth?</p> <p>Can eating and drinking damage our teeth?</p> <p>What makes up our digestive system?</p>	<p>States of Matter</p> <p>What are the states of matter?</p> <p>What happens when you heat solids?</p> <p>What is the melting point of different solids?</p> <p>What is the water cycle?</p>	<p>Living things and Environments</p> <p>What is a living thing?</p> <p>What is a habitat?</p> <p>What are food chains and food webs?</p> <p>What are classification keys?</p> <p>What is climate change and how can we prevent environmental change?</p> <p>What impact are we having on our local environment?</p>	<p>Sound</p> <p>What is sound and how is it made?</p> <p>How does sound travel?</p> <p>What changes the volume of a sound?</p> <p>What changes the pitch of a sound?</p> <p>Make your own musical instrument</p>	<p>Electricity</p> <p>What is electricity and how do we use it?</p> <p>How do I make an electrical circuit?</p> <p>What materials are conductors and insulators of electricity?</p>
5	<p>Earth and Space</p> <p>What is the Sun and what is Earth?</p> <p>What is the Solar System?</p> <p>What are the phases of the Moon?</p> <p>How have theories about Earth and space changed over time?</p>	<p>Forces</p> <p>What are forces?</p> <p>What is gravity?</p> <p>What is air and water resistance?</p> <p>What can simple machines do to forces?</p>	<p>Materials</p> <p>What properties do materials have?</p> <p>What is a conductor?</p> <p>How do materials respond to magnets?</p> <p>Which materials are soluble?</p> <p>How do we separate a mixture using filtration?</p> <p>Which separation methods will we use?</p> <p>What are reversible and irreversible changes?</p>	<p>Life Cycles</p> <p>What is a life cycle?</p> <p>How are the life cycles of birds and amphibians different from mammals?</p> <p>What is pollination in the life cycle of a flowering plant?</p> <p>Who has contributed to our understanding of life cycles?</p>	<p>Growing Older</p> <p>How do humans change as they grow?</p> <p>How do babies and children develop?</p> <p>How is gestation different for different animals?</p> <p>How do adults grow into old age?</p>
6	<p>Light</p> <p>How do we see?</p> <p>What do shadows tell us about light?</p> <p>What is reflection and refraction?</p> <p>What is light pollution?</p>	<p>Classification</p> <p>How can we arrange organisms into groups?</p> <p>What is classification?</p> <p>What are microorganisms?</p>	<p>Evolution and Inheritance</p> <p>What can fossils tell us?</p> <p>What is inheritance and adaption?</p> <p>What is natural selection?</p> <p>Why do animals become extinct?</p>	<p>Electricity</p> <p>How do we use electricity?</p> <p>Where do we get electricity from?</p> <p>How do we use circuit diagrams to represent circuits?</p> <p>How will I use my knowledge to design a child's night light?</p>	<p>Circulatory system and lifestyle</p> <p>What is the circulatory system?</p> <p>What does the heart do?</p> <p>How does exercise affect the body?</p> <p>How do drugs affect the body?</p>