Ravensworth Terrace Primary School

Science Overview

School global Themes	**1. Healthy Minds and a Sense of Wellbeing** **2. Healthy Bodies and a Sense of Adventure** **3. Cultural Capital and High Aspirations** **4. Respect, Equality and Diversity**		
Our Motto	**Together we are winners!**		
British Values	**Rule of Law, Respect and Tolerance, Democracy and Individual Liberty**		
Secrets of Success	**Respect** **Independence**	**Kindness** **Perseverance**	**Teamwork** **Understanding Others**
EYFS			
Reception	**Continuous Provision:** **Understanding the World** Understanding of the World (UotW) is one of the four specific areas of learning in the EYFS framework. It involves guiding children to make sense of their physical world and their community through opportunities to explore, observe and find out about people, places, technology, and the environment. Through continuous provision, pupils will explore the following: • Look closely at similarities, differences, patterns and change in nature. • Know about similarities and differences in relation to places, objects, materials and living things. • Talk about the features of their own immediate environment and how environments might vary from one another. • Make observations of animals and plants and explain why some things occur, and talk about changes. **The Wanderlust Curriculum** A yearly programme looking at how we connect with nature each and every day. Through the Wanderlust curriculum we develop children's understanding of the natural rhythm of the seasons and offer opportunities to learn about wildlife, natural phenomena and the natural world around us.		
Key Stage 1			
Year 1	**Seasonal Change and Weather (Physics)** Can you describe the weather? Can you name the 4 seasons? Can you describe the difference between the seasons?		
	Animals including humans (Biology)	**Everyday Materials (Chemistry)**	**Plants (Biology)**

	What are the parts of our bodies? What are our senses? Are there different kinds of animals? Do animals feed in different ways?	Can you name everyday materials? What are the properties of everyday materials? Can you compare the properties of materials? Which materials would be best and why?	What are the parts of a plant? Can you name different types of plant? How do trees survive the winter? Where can I find plants? Where can plants live?	
Year 2	**Use of everyday of Materials. (Chemistry)**	**Living things and their habitats (Biology)**	**Plants (Biology)**	**Animals including humans / Healthy Lifestyles (Biology)**
	What are things made from? Do materials have different properties? Can we change the shape of materials? What are solids, liquids and gases?	What makes something living or non-living? Can you identify living, dead and non-living things? What is a habitat? How are living things suited to their own habitat? What is a food chain?	How do plants grow? What conditions do plants need to grow?	What happens to our bodies as we grow? Do other animals grow in the same way as us? What do we need to live and be healthy? Why is it important to exercise? Why is it important to keep clean?
Lower Key Stage 2				
Year 3	**Forces and Magnets (Physics)**	**Animals including humans (Biology)**	**Rocks (Chemistry)**	**Light (Physics)**	**Plants (Biology)**
	What is a force? How can we show and measure contact forces?	What do animals need to eat and stay healthy? What is a balanced diet?	Are there different types of rock?	What is light? Where does light come from?	Can you name the parts of plant?

	What is gravity? How do magnets behave? Are all magnets the same? Which materials are magnetic?	Why do we have a skeleton? How do we move?	Do rocks have lots of uses? How are fossils made? What are soils made up of?	What is a shadow? What materials reflect light? What materials let light through?	What conditions do plants need to grow? How does water get around the plant?
Year 4	**States of Matter (Chemistry)**	**Sound (Physics)**	**Electricity (Physics)**	**Animals including Humans (Biology)**	**Living things and their habitats (Biology)**
	What makes something a solid, liquid or a gas? What are solids, liquids and gases made of? What happens when substances change state? What is evaporation and condensation? What happens in the water cycle?	What is sound? How does sound travel to our ears? How can we change the volume of sound? How can we change the pitch of a sound?	How do we use electricity in our homes? Can you make a series circuit? How does a switch work? What are electrical conductors and insulators?	Are there different types of teeth? How should you care for you teeth? What is digestion? What are the parts of the digestive system? What is a food chain? Can you construct food chains?	Can you group living things in different ways? Can you use a classification key? What living things can we find in … habitat? Do you recognize how habitats can change?
Upper Key Stage 2					
	Earth and Space (Physics)	Properties of Materials (Chemistry)	Forces (Physics)	Living Things and their Habitats (Biology)	Animals including humans (Biology)
	What is the solar system like?	How does a material's property suit it's role? What is a solution?	What do you know about contact forces?	Can you compare animal life cycles?	What happens as we get older?

Year 5	Why does the sun move across the sky? Why do we have day and night? What are the phases of the moon?	How can mixtures be separated?	What is the effect of friction? What is the effect of air resistance? What are non-contact forces? What is up-thrust? What is a machine?	Can you describe/ explain reproduction in plants?	What happens to our bodies as we get older? What are our reproductive organs? What happens during puberty? Where do babies come from?
Year 6	Light (Physics)	Evolution and Inheritance (Biology)	Animals including humans (Biology)	Living Things and their Habitats (Biology)	Electricity (Physics)
	How does light travel? What happens when lights hits an object? How can we see around corners? How do shadows form?	Why are fossils so important? How are we different? How are we the same? How are living things adapted to their environment? How do living things change?	Do you know where your main organs are in the body? Why do we have blood? How does blood get around our bodies? What happens when we exercise? What are the effects of diet, drugs and lifestyle?	How are animals and plants classified? What types of living things are there in …? Can you make a key to classify? Where can we find microbes?	Can you make a working series circuit? How can we change the amount of energy flowing around a circuit? What is electrician resistance? What happens to energy as it flows around a circuit?