

At Lantern Lane Primary School, we aim to offer a high-quality science education which provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity. Pupils explore this idea whilst learning essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils are encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They are also encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

LLPS Science Curriculum Overview

	Autumn		Spring		Summer	
EYFS	(F1) Children talk about what they have observed in their local environment and the impact their behaviour has on this. Children demonstrate their understanding of how things work and why things happen. Children begin to talk about and explore different scientific concepts including forces, states of matter and sinking and floating.			(F2) Children explore the natural world around them, make observations and draw pictures of animals and plants. Children know some similarities and differences between the natural world around them and the contrasting environment by drawing upon their experiences and what has been read in class. Children understand through exploration some important processes and changes in the natural world around them including the seasons and changing states of matter.		
Y1	Animals including humans (Basic parts of the human body).	Seasonal Changes Autumn/Winter (Observe changes across the seasons and describe weather associated with the season).	Everyday Materials (Identify, name and describe properties of materials and compare).	Animals including humans (Identify common animals, name herbivores, carnivores and omnivores and describe/compare the structure of animals).	Seasonal Changed Spring/Summer (Observe changes across the seasons and describe weather associated with the season).	Plants (Identify and name plants and describe the basic structure).
Y2	Animals including humans (Discuss offspring, find and describe basic needs of animals and describe importance of exercise/food/hygiene).	Use of everyday materials (Identify and compare suitability of materials and find out how some materials can be changed by squishing, bending etc.)		Plants (Observe and describe seeds/bulbs/plants, find out and describe what plants need to grow and stay healthy).	Living things and their habitats (Explore and compare differences between living and dead, discuss habitats and identify/name plants and animals in their habitats).	
Y3	Rocks (Compare and group rocks, describe how fossils are formed and recognise that soil is made from rocks).	Animals including humans (Identify that animals inc. humans need the right nutrition, and this is from food, identify skeletons and muscles).	Light (Recognize that we need light to see, discuss reflection, recognize how shadows are formed and understand that light from the sun can be dangerous).	Forces and Magnets (Observe how magnets attract and repel, compare magnetic/non-magnetic materials, describe magnets as having 2 poles).		Plants (Identify and describe the functions of parts of a flowering plant, explore the requirements of plants for growth, explore the role flowers play in the life cycle of flowering plants).
Y4	States of Matter (Compare/group solids, liquids and gases, observe materials changing state and identify parts of the water cycle).	Sound (Identify how sounds are made, recognize that vibrations travel, discuss pitch and volume).	Electricity (Identify appliances, simple circuits, recognize switches and identify conductors and insulators).		Animals including humans (Describe the human digestive system and identify the different types of teeth and their functions/construct and interpret food chains)	Living things and their habitats (Explore and use classification keys and recognise that environments can change).
Y5	Properties and the changes of materials (Know that a material will dissolve in liquid to form a solution, describe how to recover a substance from a solution, use knowledge of solids, liquids and gases and explain that some changes result in new materials).	Properties and the changes of materials (Compare and group everyday materials, give reasons based on evidence from comparative and fair tests).	Living things and their habitats (Describe the differences in life cycles and describe the life process of reproduction in some animals and plants).	Animals including humans (Describe the changes as humans develop to old age).	Earth and Space (Describe the movement of Earth and other planets, describe the movement of the moon relative to the Earth and explain day and night using the idea of the Earth's rotation).	Forces (Discuss gravity and it's effects on objects, identify the effects of air resistance, water resistance and friction and recognize some mechanisms).
Y6	Electricity (Associate the brightness of a lamp with the number and voltage of cells used in a circuit, compare and give reasons for variations in how components function and use recognised symbols when representing a circuit diagram).	Light (Recognise that light travels in straight lines, discuss light traveling from a light source to our eyes and discuss shadows).		Animals including humans (Identify and name parts of the human circulatory system, describe the functions of the heart, blood vessels and blood, recognise the impact of diet, exercise, drugs and lifestyles and describe how nutrients and water are transported).	Living things and their habitats (Describe how living things are classified based on similarities and differences, including micro-organisms, plants and animals and give reasons for classifying plants and animals).	Evolution and inheritance (Recognise that living things have changed over time, recognise that living things produce offspring and identify how animals and plants have adapted).