Science Overview 2024

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Pre-School	**Marvellous Me** Children begin to make sense of who they are.	**What happens in the day and the night?** Children begin to make sense of the world around them.	**Let's look at toys!** Children begin to explore how things work and move.	**Take a look at Spring!** Children begin to understand and notice changes in the season spring.	**What happens in the garden?** Children begin to make sense of the world around them.	**Going on a journey.** Children begin to explore own home and community, then continue their journey by looking at the seaside.
Reception	**Who am I?** Children describe changes in themselves and who their family is.	**How do we change food?** Children explore food through senses and how certain foods can be changed.	**Where in the world?** Children taste, explore and describe foods from around the world, as well as changes in the weather.	**How does weather affect animals?** Children will discuss hot and cold climates. Explore how change can affect animals and their environments. **How do we keep healthy?** Children begin to understand what helps us to keep healthy – linked to Jigsaw.	**How does your garden grow?** Children will explore and describe what they can see outside and how things grow.	**Where does the water in puddles go?** Children find out where water comes from and look at the water cycle.
Year 1	**What do we know about materials?** Children begin to explore a variety of materials, describing and comparing them before moving onto simple investiagtions.	**What changes in Autumn/Winter?** Children explore and discuss the changes that take place in Autumn and Winter.	**What makes an animal, an animal?** Children learn about animals and the groups they belong to, inc pets. Look at diets and then describe simple structure of animals.	**What will you wear this season – Spring?** Children will explore and discuss changes that take place in Spring.	**What do we know about the human body?** Children learn about the human body and use senses to explore the world around them. **What plants are in our environment?** Children learn about common plants and their basic structures, also what is meant by deciduous and evergreen.	**How can you tell when it is Summer in the UK?** Children explore and discuss the changes that take place in Summer.
Year 2	**Can you build a bridge from paper?** Children learn about the sustainability of a variety of everyday materials for their purpose.		**Do all animals look like smaller versions of their parents?** Children learn about animals and their offspring, a variety of life cycles and what animals need to survive.	**What's in a habitat?** Children explore living things and their habitats.	**Do all food chains start with a plant?** Children learn about food chains and how living things depend on each other.	**How do I keep a plant healthy?** Children set up a simple test to find out what plants need to stay healthy and observe over time.
Year 3	**Why do we need light?** Children explore the way that light behaves, inc sources, reflection and shadows.	**What are rocks and soils like?** Children learn that rocks can be places into 3 categories, and that soils are made from rocks.	**Term 3 is focussed on investigations relating to working scientifically. The children will ask questions and answer them, set up simple**	**How can we move magnets?** Children will observe how magnets attract or repel each other and various materials.	**What do our bodies do with the food we eat?** Children develop understanding of the main body parts and	**How is water transported within a plant?** Children identify and describe function of different parts of flowering plants, explore

		Also explore how fossils are formed.	**experiments, they will compare and learn about fair testing. They will have the opportunity to observe and take measurements using a range of equipment. They will gather data, record and present their findings in a variety of ways to help answer a question. The children will use their knowledge and learning to make predictions. They will use their findings to draw simple conclusions, suggest improvements and raise further questions.**		are introduced to nutrition.	requirements of plants of life and growth and investigate water transportation.
Year 4	**What is "states of matter"?** Children use their knowledge and understanding of everyday materials to understand states of matter.	**How can we make different sounds?** Children will learn how sounds are made and how sound travels.		**What can we do with electricity?** Children will identify common appliances that run on electricity, construct simple circuits, and identify and name simple parts.	**Can you describe the digestive system?** Children learn about parts of the digestive system and how they work. They will also construct and interpret a variety of food chains.	**How can the changing environment affect living things?** Children use classification keys to group, identify and name a variety of living things.
Year 5	**Sun, Earth and Moon: What is moving and how do we know?** Children begin learning about Earth and Space	**How and why do objects move?** Children learn why unsupported objects fall towards Earth, identify the effects of air resistance, water resistance and friction. Also, they explore a variety of mechanisms.		**Do all plants and animals reproduce in the same way?** Children describe differences between animal life cycles and the process of reproduction in some plants and animals.	**How can we change materials reversibly and irreversibly?** Children explore changes inc. evaporating, filtering, sieving, melting and dissolving.	**How do we change as we get older?** Children focus on the growth and development of humans.
Year 6	**How can we vary the effects of electricity?** Children will build on their knowledge gained in Y4. Learn about voltage and using symbols when representing a simple circuit in a diagram.	**Why does my shadow change over the course of the day?** Children will develop their understanding of light, exploring how it behaves, inc sources, reflections and shadows.		**How do our choices affect how our bodies work?** Children will identify and name the main parts of the human circulatory system and learn how the choices we make impacts the way our bodies function.	**How have living things evolved and adapted to their environments?** Children learn about how things have changed over time.	**In what ways can we sort living things?** Children describe how living things are classified into broad groups and give reasons for classifying plants/animals based on specific characteristics.

Year 7	**What are the Scientific principles?** Children learn about lab safety, increasing confidence and practical ability with a range of equipment. **Chemistry – Can you separate particles?** Children learn about different properties of solids, liquids and gases. **Chemistry – What is reactive chemistry?**	**Physics (forces) – Can we use the density of an object to predict if it will sink or float?** Children will measure force using a Newton metre, carry out a practical to measure density and be introduced to the speed, distance and time equation. **Physics (solar system) – Why is the moon so important to us on Earth?** Children learn about scale of planets in solar system, phases of the moon and different eclipses.	**Biology (Living things and the environment) – What are the pros and cons of selective breeding?** Children describe key features of different habitats, learn about selective breeding and look at predator/prey relationships. Begin to understand food webs and pyramid of numbers. **Biology (Cells) – What's in a cell?** Children draw and label plant and animal cells and describe functions of parts, prepare their own animal and plant cell and use a microscope to look

	Children carry out practicals involving reacting acids with metals and carbonates, learn about acids and alkalis and use various indicators to test the pH of different substances.		closely. Also learn about specialised cells and mitosis.