St Mary's RC Primary School
HEP Science Curriculum Map 2024-25

These units of learning are covered over the year in EYFS.									
	Animals including humans and health	**Living things and their habitats**	**Plants**	**Materials and their properties**	**Forces**	**Electricity**	**Light**	**Sound**	**Space and seasons**
Nursery	Know simple difference between animals and humans Understand basic hygiene practices	Know what a habit is and recognise how different animals live in different places	Participate in planting, caring for seeds. Begin to identify plant parts.	Identify basic differences when exploring materials and mixtures.	Experience and observe simple forces	Experience and explore simple electrical toys	Recognise sources of light.	Recognise loud and soft sounds from sources.	Recognise day and night and seasonal changes
Rec	Understand human body parts, healthy habits. Distinguish between different animals	Understand how different habitats change to meet the needs of inhabitants.	Identify basic parts of the plant and the key features of the life cycle.	Understand and describe properties in different materials and recognise changes	Explore the impact of different forces in a variety of contexts	Understand the use of batteries and some aspects of electrical safety.	Understand how light interacts with different objects	Understand how sounds are sourced and how they can change	Identify key planets and discuss changes of the moon's appearanc e

Year	**Autumn 1**	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
1	**Everyday Materials**	**Human Body Parts**	**Plants**	**Animal Groups**	**Animals Diets**	**Seasonal Changes**
	Identify and classify everyday materials; describe and compare their properties	Identify and label basic body parts; associate body parts with senses	Identify and describe common plants;observe plant parts and growth	Identify and classify animals into groups (mammals, birds, fish, etc.); compare animal characteristics	Classify animals by diet (herbivores, carnivores, omnivores); relate physical characteristics to diet	Observe and describe seasonal changes; record weather patterns and how they affect living things
2	**Local Habitats**	**Habitats & Microhabit ats**	**Use of Everyday Materials**	**Growing Plants**	**Animal Needs**	**Food Chains and Health**
	Distinguish between living, dead, and never alive; explore local habitats and how they meet needs	Investigate different habitats and microhabitats; understand how conditions affect living things	Compare the suitability of materials for different users; explore how materials change shape.	Observe how seeds and bulbs grow; learn about plant needs (water, light, temperature)	Learn about animal life cycles; understand basic needs ofanimals and humans (food, water, air)	Create simple food chains; learn about human health and the importance of a balanced diet
3	**Plants**	**Rocks**	**Light**	**Animals including humans**	**Forces and magnets**	**Bee project**

	Parts of plants, needs of plants and their life cycle	Comparing different rocks, fossils, soil formation	Light sources, how light is reflected off objects, how shadows form, changing shadows and eye protection	Nutrition, Musculoskeletal system for support, movement and protection	Non-contact forces, attraction and repulsion of magnets, magnetic materials and the N and S pole of magnets	A look at the relationship between bees and their environment; importance in pollination, food and other resources
4	**States of matter**	**Animals including humans**	**Sound**	**Living things and their habitats**	**Electricity**	**The History of Science**
	Group materials based on their properties, changes of state, heating and cooling, the water cycle	Eating, teeth, digestive system and food chains, producers, predators and prey	Making sounds, vibrations, the ear, changes in pitch and volume	Classification, characteristics, and the effects of environmental changes	Appliances, building circuits and identifying components, circuit diagnostics, conductors and insulators	This unit focuses on the development of scientific theories by a diverse range of scientists and inventors, both historical and contemporary
5	**Properties and changes of materials**	**Animals including humans**	**Forces**	**Living things and their habitats**	**Earth and space**	**The Scientific Method**
	Classifying materials, Dissolving, separating and changes of state, uses of materials, reversible and irreversible changes	Life cycles, plant and animal reproduction, human life cycle	Gravity, air resistance, Water resistance and friction between moving surfaces, multiplying forces using levers, pulleys and gears	Classifying living things, Life cycles of mammals, amphibians, insects and birds	The movement of Earth, other planets and the Moon in relation to the Sun and each other, spherical bodies, night and day	The unit looks at the steps that scientists follow when thinking about a problem and how to solve it
6	**Animals including humans**	**Science of Light**	**Electric Circuits**	**Evolution and inheritance**	**Classifying Living Things**	**Transition Unit**
	The circulatory system, lifestyle, health and disease; transport of water in animals	How light travels, how we see objects, the shape of shadows	The effects of changing the number and voltage of cells in a circuit; varying the function of components; representing circuits using symbols	What we learn by looking at fossils; variation, reproduction and adaptation. Evolution	Classifying microorganisms, plants and animals	Introduction to cell biology, energy forms and transformations, properties of materials, forces, and basic principles of chemical reactions