

The Meadow Community Primary School



Science Overview



| <u>Year</u> | <u>Units 1 and 2</u> | <u>Units 3 and 4</u> | <u>Units 5 and 6</u> |
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| 1 | <p>My Body We will be identifying and naming the human body parts. We will be using our sense to compare taste, sound and texture.</p> <p>Everyday materials We will be identifying and exploring everyday materials such as wood, plastic, glass and metal. We be exploring their properties and finding out why different materials are used for different objects. Famous scientist Charles Mackintosh</p> | <p>Seasonal changes We are going to be observing how plants change over the seasons. For example, leaves falling off the trees. We also look at weather changes. Enrichment – local walk</p> <p>Finding out about plants We will be identifying the different parts of a plant and exploring their function. We will also be looking at different types of plants using scientific discovery. Enrichment – Botanical gardens trip</p> | <p>Finding out about animals We will be exploring the different types of animals (mammals, birds, fish, amphibians and reptiles) and comparing/ sorting them. Famous scientist Malaika Vaz.</p> <p>Scientific discovery We are learning to use observations and ideas to suggest answers to questions. We are also learning to gather and record data to help in answering questions. We recap our materials topic to cover these skills.</p> |
| 2 | <p>Living in habitats Identifying global and local habitats and what lives in them. Understanding life processes and things necessary for life.</p> <p>Exploring everyday materials Investigating the properties of materials. How they can be identified and used.</p> | <p>Growth and survival Investigating what things plants and animals need to survive and thrive.</p> <p>Growing plants Investigating what things, a plant needs to grow healthily. Identifying and naming the parts of a plant.</p> | <p>Super scientists looking at a variety of famous scientists and their contribution to the world of science and everyday life.</p> <p>Staying healthy how to stay healthy, exercise, diet, sleep. Learning about good and bad drugs.</p> |
| 3 | <p>Health and movement Learn how animals, including humans, need specific nutrition to help them move and grow, and how humans and some other animals have skeletons and muscles to help their bodies move.</p> <p>Rocks, fossils and soils Identifying and classifying different kinds of rocks and what they can be used for, exploring a variety of soils and finding out how it is formed and discovering the fascinating world of fossils! We will study Mary Anning. Enrichment – rock hunt around school</p> | <p>Rocks, fossils and soils - continued Identifying and classifying different kinds of rocks and what they can be used for, exploring a variety of soils and finding out how it is formed and discovering the fascinating world of fossils! We will study Mary Anning. Enrichment – rock hunt around school</p> <p>How plants grow Identify the functions of the different parts of a plant, investigate what plants need in order to grow well and explore how plants reproduce. Famous scientist Joseph Banks (botanist). Enrichment – Botanical gardens trip.</p> | <p>Forces and magnets Through practical enquiry and scientific research children will understand what forces are and will compare how things move on different surfaces. They will explore how magnetic forces work, identify magnetic materials and investigate uses for magnets. Famous scientists The Wright brothers and Henry Ford</p> <p>Light and Shadows Understand that we need light in order to see, explore the Sun as a light source, identify the difference between night and day and explore how light is reflected from surfaces. Investigate what shadows are, why they are formed and how they behave as well as how the size of shadows change throughout the day. Famous scientists Joseph Swan and Thomas Edison (race to invent the lightbulb).</p> |

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| <p>4</p> | <p>Eating and Digestion – Teeth The digestive system in human and animals and the functions of teeth. Herbivores, carnivores and omnivores in the context of teeth, digestion and the food chain.</p> <p>Circuits and Conductors Understanding how circuits work, the differences between mains and battery-powered electricity, how to make a switch and which materials are conductors and which are insulators. We will study Thomas Edison.</p> | <p>States of Matter The differences between solids, liquids and gases, and how different materials can change state. Learning about the processes of evaporation and condensation, and the water cycle.</p> | <p>Changing Sound Exploring what sound is and how it is made, investigating how sound travels, how it can be blocked, how different pitches can be attained. We study Alexander Bell.</p> <p>Living in environments Identifying a range of British plants and animals, and how to classify organisms, including the use of classification keys. Learning why organisms live in different habitats and the impact, both positive and negative, that humans can have on environments. Enrichment – Forest schools – Conkers trip.</p> |
| <p>5</p> | <p>Earth and space Children will use evidence to present an argument about the shape of the earth; explain the movements of the Earth, Moon and Sun; investigate night and day; use data to explain what happens to the Sun during the year; show the different phases of the Moon; name and describe features of the planets in our solar system and put them in order. Enrichment – Leicester University visitor (space centre). Black History Month – Black American space exploration.</p> <p>Changes and reproduction Children will describe the stages of human development; compare gestation periods of humans and other animals; recognise stages of development in childhood; understand the changes that occur and how to stay fit and healthy during puberty and explore the changes that occur from adulthood to old age.</p> | <p>Properties and changes of materials Children will explore what happens to a material when they add water; how some materials can be changed back to their original state; describe what happens to make an irreversible change; know the difference between a reversible and irreversible change when materials are heated or cooled.</p> <p>Life cycles Children will label the parts of a flowering plant and talk about their functions; explain the process of cloning; describe the sexual process of reproduction in animals; compare the life cycles of different animals; compare how different animals reproduce and grow and find out about the work of naturalists. Famous scientist – David Attenborough</p> | <p>Forces in action Children will find out about the life and discoveries of Sir Isaac Newton; investigate friction; identify and explain the effects of air resistance; explore the effects of water resistance on an object and explore pulleys, leavers cogs.</p> |
| <p>6</p> | <p>Animals including humans - healthy bodies How lifestyle choices impact the different systems of the body. We study the heart and circulatory system. Famous scientist Carl Linneus</p> <p>Living things and their habitats, classifying organisms Children learn about the different systems that are used to classify organisms and how this classification enables scientists to distinguish similarities and differences.</p> | <p>Evolution and Inheritance Learn about the theories of Charles Darwin and how natural selection leads to the theory of evolution and adaptation.</p> <p>Seeing light Children learn about the human eye and how it is used to see light. They investigate how light can be split and the spectrum it is made up from.</p> | <p>Electricity - changing circuits Children learn about the different types of circuits that exist and the correct scientific notation to draw circuit diagrams. Working scientifically.</p> <p>Influential scientists Children learn about a range of different scientists and they impact they have had on how thinking has changed throughout time.</p> |