YEAR 3	Plants	Identify functions of different parts of flowering plants. Explore the requirements of plants for life and growth within its life cycle.
	Animals including humans	Understand the importance of nutrition. Identify that humans and some other animals have skeleton and muscles for support, protection and movement.
	Rocks	Compare and group together different kinds of rocks. Describe how fossils are formed.
	Light	Explore and investigate how shadows are formed. Know how magnets behave.
	Magnetic force	Compare and group materials on the basis of whether they are attracted to a magnet.
YEAR 4	Electricity	Construct a simple circuit. Recognise conductors and insulators of electricity.
	Animals including humans	Identify the different types of teeth in humans and their functions. Construct and interpret a variety of food chains.
	Living things and their habitats	Explore and use classification keys to group and name living things. Examine the impact that changing environments can have on life.
	States of matter	Group materials according to solids, liquids and gases. Understand the water cycle.
	Sound	Identify sounds as vibrations and explore volumes and pitches.
YEAR 5	Earth and Space	Describe the movement of the Earth and other planets relative to the sun. Use the idea of the Earth's rotation to explain night and day.
	Animals including humans	Describe changes as humans develop to old age.
	Living things and their habitats	Investigate differences in life cycles of a mammal, amphibian, insect and a bird.
	Materials.	Apply knowledge of solids, liquids and gases to decide how mixtures can be separated.
	Forces	Explore the effects of mechanisms including levers and pulleys on allowing a smaller force to have a greater effect.
YEAR 6	Living things and their habitat	Explain classification of living things
	Animals including Humans	Recognise the impacts of diet, exercise, drugs and lifestyle on the way their bodies function.
	Evolution & inheritance	Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.
	Light	Recognise that light travels in straight lines.
	Electricity	Investigate the effects of changes to an electrical circuit. Use recognised symbols in their diagrams.

Science
At
Northwick Manor Primary School
2021

Science at Northwick Manor Primary School

At NMPS we recognise the importance of Science in every aspect of daily life. We want our pupils to be naturally curious about the world around them. Throughout our school, pupils are encouraged to develop and use a range of working scientifically skills including questioning, researching and observing for ourselves. We promote and celebrate these skills. We want our pupils to have a broad vocabulary. Scientific language is to be taught and built upon as topics are revisited in different year groups and across key stages. We intend to provide all pupils regardless of ethnic origin, gender, class, aptitude or disability with a broad and balanced science curriculum.

How do the children learn about Science?

At Northwick Manor Primary School we believe in active learning, with the children having a 'hands on' approach to science. We want the children to become excited at the prospect of investigating and experimenting and enjoy what they are learning.

EYFS

In the Early Years Foundation Stage, Science comes under the umbrella of "Knowledge and Understanding of the World". It is taught in a very cross curricular and practical way. Children have opportunities to explore and investigate a range of materials and objects. Careful use of the outside area is made to harness the children's fascination of the world around them.

Key Stages 1 and 2

Much of the Science work continues to be practical. We also aim to deepen and broaden their scientific learning in a range of exciting ways, including the following:

- Opportunities to devise, plan and carry out a range of Scientific investigations.
- Trips to museums or other places of scientific interest.
- Taking a cross curricular approach to Science where children become engaged and involved in scientific thinking through various topics. For example, in Year 3 the children become nutrition and fitness advisors in their topic on 'Healthy Living'.

What do we teach in Science?

Year Group	Science Topic	Examples of skills and concepts covered in each topic
EYFS	Animals including humans . Seasonal Changes 'Autumn' Forces Plants Living things and their Habitats	All About Our Bodies Labelling body parts and senses Great Pet Sale' Care and needs of animals. Looking at trees through the seasons. Floating and sinking linked with water transport. Labelling parts of a plant. What plants need to grow. Life cycle of a plant. Mini Beasts Observational drawings and bug hunt in forest school.
YEAR 1	Plants Animals Including humans Seasonal Changes Materials	Identify & name a variety of common plants and describe their structure. Identify & name a variety of animals and learn about what they eat. Name and label basic parts of the human body. Observe changes across the seasons. Describe the weather. Identify a range of materials and their properties.
YEAR 2	Plants Animals including humans Living things and their habitats Materials	Describing key part of a plant and the functions of different parts of flowering plants. Investigating the requirements of plants for life and growth. Understand the basic needs for survival Investigate how to stay healthy and the importance of a balanced diet and regular exercise. Understanding the 7 life processes. Exploring the characteristics of a range of materials .