



Hassocks Infant School
Skills Progression

Subject area: Science

Early Years Development Matters – Understanding the World (The World): Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.

National curriculum purpose of study: A high-quality science education 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, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

National curriculum aims:

The national curriculum for science aims to ensure that all pupils:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them.
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

School intent: At Hassocks Infant School it is our intent to encourage our children to be curious about natural phenomena and satisfy their curiosity with knowledge. In our rapidly evolving world it is important our children are taught essential aspects of Scientific knowledge, methods and processes. They will be given first hand opportunities to experience Science in action. We encourage our pupils to ask lots of questions, investigate and evaluate their Scientific findings. Children will learn to question and discuss science-based issues that may affect their own lives, the direction of society and the future of the world.

Skill	Reception	Year 1	Year 2
Working Scientifically	<ul style="list-style-type: none"> ● Make simple observations of the world around them. ● Children make links in their learning using prior knowledge and experiences. ● Talk about answers to questions. ● Can record using marks which can be interpret and explain. ● Explore simple scientific equipment in the environment e.g. magnifying glasses, cameras, bug viewers, sorting hoops, containers, pipettes 	<ul style="list-style-type: none"> ● Ask simple questions. ● Use observations and ideas to suggest answers to questions ● Use simple scientific equipment for an investigation. ● Perform a simple test: predict, carry out and make simple evaluations. ● To identify and classify objects and materials using a variety of criteria. ● Gathering and recording data to help in answer questions. 	<ul style="list-style-type: none"> ● Ask simple questions and recognise they can be answered in different ways. ● Use observations and ideas to suggest answers to questions with a detailed explanation. ● Select and use appropriate scientific equipment for an investigation. ● Perform a simple test: plan, predict, carry out and evaluate.

	<ul style="list-style-type: none"> • Perform a simple test: observe simple cause and effect e.g. melting, freezing. • Carry out simple sorting activities recognising similarities and differences. 		<ul style="list-style-type: none"> • To identify and classify objects and materials using a variety of criteria giving reasons for their choices. • Decide ways to gather and record data to help in answer questions.
Plants	<ul style="list-style-type: none"> • Use senses to explore and talk about plants. • Children observe plants in their environment and talk about the changes they go through. • Describe what a plant looks like and begin to name simple parts e.g. petals, roots, leaves, stem. 	<ul style="list-style-type: none"> • Compare different plants. • Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees • identify and describe the basic structure of a variety of common flowering plants, including trees. • Label the parts of the plant and talk about their purpose e.g. roots to take up water. 	<ul style="list-style-type: none"> • Grow a seed and/or bulb and observe how they grow into mature plants. • Talk about the lifecycle of a plant. • Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.
Everyday Materials and Uses of Everyday Materials	<ul style="list-style-type: none"> • Group together a variety of materials based on their properties e.g. soft, hard, strong. • Compare and group together a variety of everyday materials. • Sort materials into their material type. 	<ul style="list-style-type: none"> • Distinguish between an object and the material from which it is made. • Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. • Describe the simple physical properties of a variety of everyday materials. 	<ul style="list-style-type: none"> • Discuss uses for materials and give reasons. • Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. • Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.
Seasonal Changes	<ul style="list-style-type: none"> • Observe changes across the four seasons. 	<ul style="list-style-type: none"> • Observe and describe weather associated with the seasons. • Observe and describe how day length varies in seasons. 	<ul style="list-style-type: none"> • To recognise and compare the lifecycle of a plants in different seasons.
Living Things and Their Habitats	<ul style="list-style-type: none"> • To talk about and explore empathy towards all living things in the environment. • To name animals in different environments. • Begin to sort animals to where they may live. • To talk about own environment and how environments may vary from one another. 	<ul style="list-style-type: none"> • Identify and name a variety of plants and animals in their habitats, including microhabitats. • Sort and group living things into their habitats. • Talk about animal habitats. 	<ul style="list-style-type: none"> • Explore and compare the differences between things that are living, dead, and things that have never been alive • Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other

			<ul style="list-style-type: none"> Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.
Animals including Humans	<ul style="list-style-type: none"> Identify and name the basic parts of the human body and say which part of the body is associated with each sense. 	<ul style="list-style-type: none"> Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Identify and name a variety of common animals that are carnivores, herbivores and omnivores Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) Draw and label the basic parts of the human body and talk about its use. 	<ul style="list-style-type: none"> Notice that animals, including humans, have offspring which grow into adults. Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

Impact: *(How will we know what pupils have learned?)*

The impact of our Science curriculum will be evident in the children's Learning Journey books, on class and corridor displays and through the observations teachers record for children. Teacher Assessments in Science will be monitored through the use of Target Tracker and teachers will input assessments at the end of each term. Key questions will be displayed to allow children to demonstrate their knowledge and understanding.