



YEAR 7 LEARNING JOURNEY INFORMATION

SCIENCE

Movement

Particle Model

Speed and gravity



Autumn term 1

Knowledge: I will explore how humans produce movement using muscles and bones. I will develop an understanding of the particle model, describing the properties of solids, liquids and gases. I will investigate how gravity influences the motion of objects and learn how to measure and calculate speed, using scientific data to compare movement.

Skills: I will learn how to use a Bunsen burner, draw graphs and describe observations.

Cells

separating mixtures

Electricity



Autumn term 2

Knowledge: I will learn that all living things are made of cells and explore the structures and functions of plant and animal cells. Investigate mixtures and use separation techniques filtration, evaporation and chromatography. I will build and test simple electrical circuits, learning how electricity flows and how circuit components work. Through practical investigations, I will develop scientific enquiry skills and confidence in explaining everyday scientific phenomena.

Skills: I will learn how to use a microscope.

Variation

Metals and non-metals

Energy



Spring term 1

Knowledge: I will explain how individuals within a species vary and describe features as inherited or influenced by the environment. I will identify the properties of metals and non-metals and explain how these properties make them suitable for different uses. I will describe how energy is stored and transferred and recognise that energy cannot be created or destroyed.

Skills: I will use scientific vocabulary, observations and evidence to explain and investigate the world around me.

Human Reproduction

Acids and Alkalis

Sound waves



Spring term 2

Knowledge: I will learn about the changes that occur during human reproduction and understand how babies develop from fertilisation to birth. I will learn the properties of acids and alkalis, use indicators safely, and explain how substances can be neutralised. I will also explore how sound is produced, travels through different materials, and is detected by the ear.

Skills: I will develop skills in observing, measuring and analysing investigative evidence.

Interdependence

Earth

Light



Summer term 2

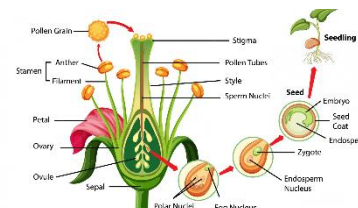
Knowledge: I will learn how living things depend on one another in habitats and ecosystems, and how changes can affect food chains. I will learn about the structure of the Earth and the processes that shape it over time, erosion and the rock cycle. I will learn how light travels, how reflections are formed, and how light helps me see objects around me.

Skills: I will develop skills interpreting evidence using scientific vocabulary.

Plant reproduction

Universe

Practical skills



Summer term 2

Knowledge: I will learn how plants reproduce, including the roles of flowers, pollination, fertilisation and seed dispersal. I will learn about the Universe, including the Solar System, the movement of planets, and how day and night and the seasons occur. I will learn how scientists plan investigations, carry out practical work safely, and collect accurate data.

Skills: I will develop my skills in observing, measuring, recording results, analysing evidence and drawing conclusions using scientific vocabulary.