

## Autumn Term Year 3 Science Overview

### Key facts

- There are 3 types of rocks (Sedimentary, Igneous, Metamorphic)
- Igneous rocks are volcanic and form from molten material
- Sedimentary rocks are formed from eroded fragments of other rocks or even from the remains of plants or animals
- Metamorphic rocks are sedimentary or igneous rocks that have been transformed by pressure, heat, or the intrusion of fluids.

## Rocks

### Brief summary/ overview

Children will learn that there are 3 different types of rocks and be able to distinguish between and identify each of the rock types. Children will learn and investigate how soil is formed.

### Prior Knowledge

That rocks can be natural or manmade.

Rocks can be found on beaches or in the sea.

Light houses in the sea warn people about rocks.

### Key Vocabulary

Rocks	Sedimentary
Soil	Palaeontologist
Fossils	
Mary Anning	
Metamorphic	
Igneous	

### Resources

- Rocks
- Soil
- Fossils
- Books
- Internet

### Cross curricular links/visits

Geography – Volcanoes

## Spring Term Year 3 Science Overview

### Key facts

- Magnets have 2 poles – North and South
- Around the poles the area is known as magnetic fields
- Magnetism can attract magnetic objects or push them away.
- Magnets only attract certain types of metals, other materials such as glass, plastic and wood aren't attracted.
- Friction slows down the speed at which something travels.

## Forces and Magnets

### Brief summary/ overview

This topic enables children to develop an understanding of what a force is and how magnetic forces work.

Children will learn how different surfaces impact movement and how this is linked to magnets.

### Prior Knowledge

Children will have an understanding of carrying out an investigation, making predictions and recording their findings. All children have a basic understanding of a force – push and pull.

### Key Vocabulary

Push	Attract	Poles
Pull	Repel	Friction
Gravity	Materials	North
Contact	Magnet	South
Attraction	Magnetism	
Magnetic	Forces	

### Resources

Magnets  
Toy vehicles  
Rulers  
Ramps with different surfaces  
Paperclips  
Everyday materials

### Cross curricular links/visits

History – The Romans  
Maths- statistics, measure

## Spring Term Year 3 Science Overview

### Key facts

- Humans get nutrient from eating food from different food groups
- All humans have a skeleton
- All humans have muscles and joints that all you to move
- Humans and animals can reproduce
- There are 5 animal groups amphibian, mammals, birds, fish, reptiles
- Humans are encouraged to eat a balanced diet.

### Animals including animals

### Brief summary/ overview

Children will learn that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.

### Prior Knowledge

Children will be able to identify certain animals and be able to describe basic things that are alive/dead. Children will need to know the functions of a skeleton and how muscles and joints work.

### Key Vocabulary

Health	Fats
Sugars	Repair
Vitamins	Carbohydrates
Minerals	Energy
Protein	Growth
Fibre	Dairy     Diet

### Resources

Food packaging

### Cross curricular links/visits

PE – importance of physical activity

## Summer Term Year 3 Science Overview

### Key facts

- They are central to life on earth
- They create food for animals to eat
- Plants produce oxygen and so are essential to keeping us alive
- Plants need water, light and a suitable temperature to grow
- Some plants can be found in the ocean
- That some plants die and regrow, others need planting regularly.

### Plants

### Brief summary/ overview

Children will need to be able to identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flower. Children will explore what plants need to grow and investigate how water is transported within plants. Children will learn about the life cycle of flowering plants.

### Prior Knowledge

Plants need water, light and a suitable temperature to grow and stay healthy.

Children will have an understanding of carrying out an investigation, making predictions and recording their findings.

### Key Vocabulary

Reproduction	Stamens
Male	Petals
Female	Botanical
Variables	Fertilisation
Fair test	Pollination
Stigma	

### Resources

Flowers  
Water  
Food colouring  
Vases  
Non-fiction books

### Cross curricular links/visits

Geography – plants that grow in different biomes/ climate zones

## Summer Term Year 3 Science Overview

### Key facts

- The sun is a source of light
- Light is measured in waves and measured on the electromagnetic spectrum
- Light travels in a straight line until it hits an object that will bend it
- There is no light in space
- Isaac Newton studied light as it hit a glass prism and saw it expand into different colours

### Resources

Glass  
Chalk  
Mirrors  
Light bulbs  
Sun light

## Light

### Brief summary/ overview

Children will learn that they will need light in order to see and dark is caused by an absence of light. They will also learn that light can be reflected from different surfaces and will be able to explain how shadows are formed.

### Prior Knowledge

That sight is a sense  
Locate eyes as a body part  
Day and night  
Plants need light to grow

### Key Vocabulary

Light	Day length
Dark	Reflective
Sun	Eyes
Natural	
Reflect	
Shadow	

### Cross curricular links/visits

Maths – data collection  
Art – Shadow drawing  
D&T – Puppet making  
Visit - Think Tank