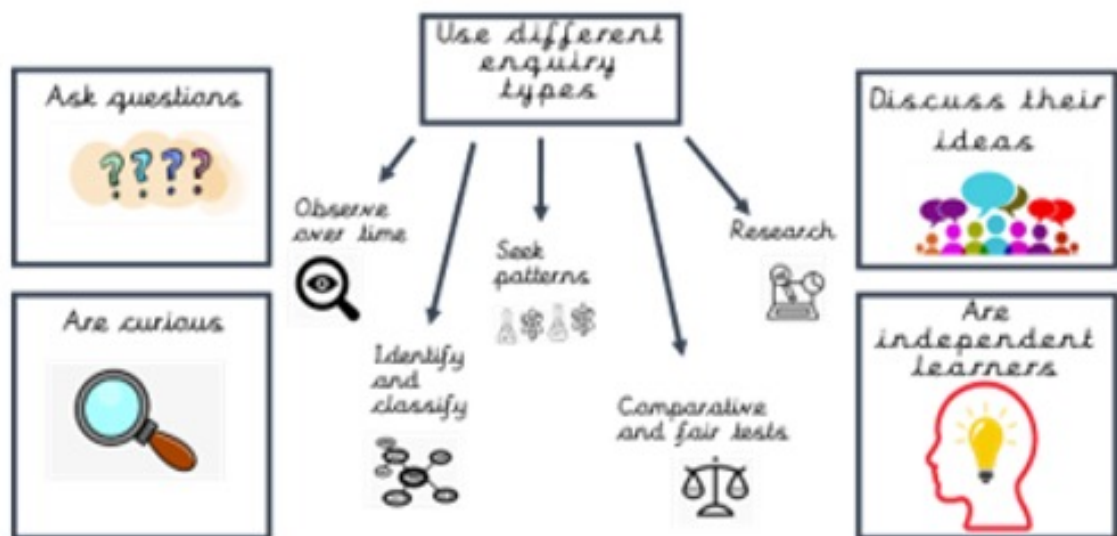
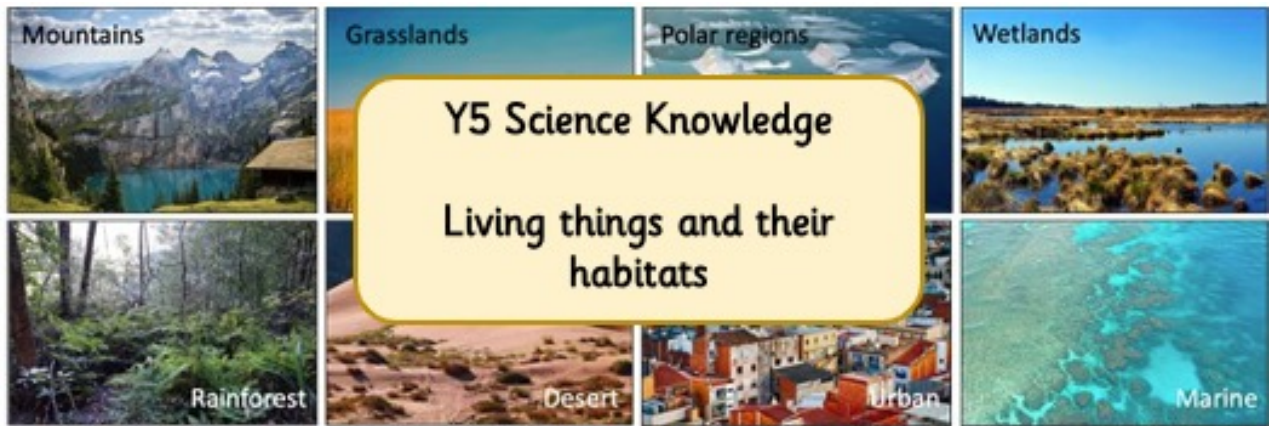


# Y5 Science Overview

## Scientists at Rivelin...





**As part of this unit children will know:**

- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- Describe the life process of reproduction in some plants and animals

**Key Vocabulary**

Life cycle, reproduce, sexual, fertilises, asexual, plantlets, runners, tubers, bulbs, cuttings

**Local Habitats**

School garden (micro-habitats), Rivelin Valley (river, woodlands, millponds)

## Y5 Science Knowledge

### Animals including Humans



As part of this unit children will know:

- Describe the changes as humans develop to old age

### Key Vocabulary

Puberty – the vocabulary to describe sexual characteristics



## Y5 Science Knowledge

### Properties and changes of everyday materials

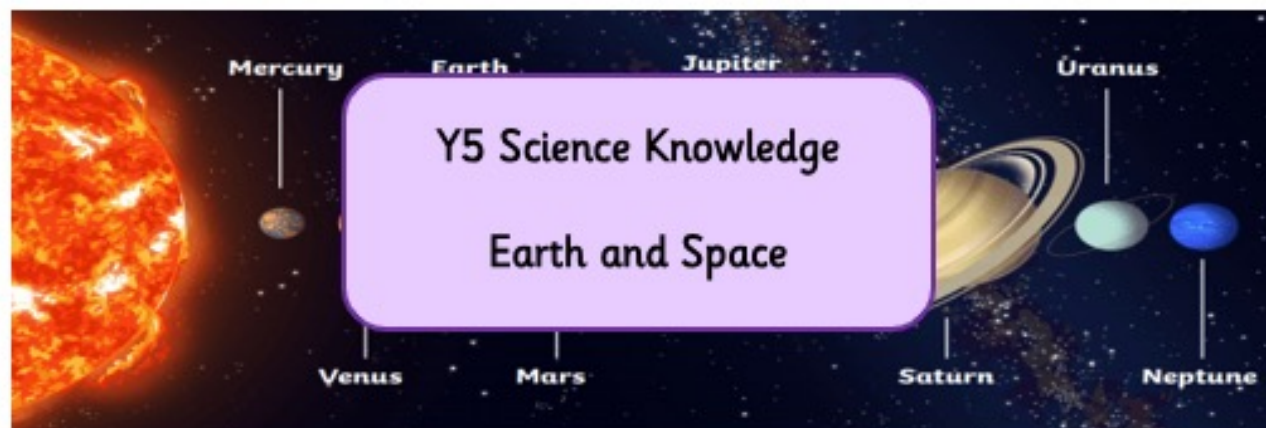
#### As part of this unit children will know:

- Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and responses to magnets
- Know that some material will dissolve in liquid to form a solution and describe how to recover a substance from a solution
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating
- Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
- Demonstrate that dissolving, mixing and changes of state are reversible changes
- Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda

#### Key Vocabulary

Thermal/electrical insulator/conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve, reversible/non-reversible change, burning, rusting, new material



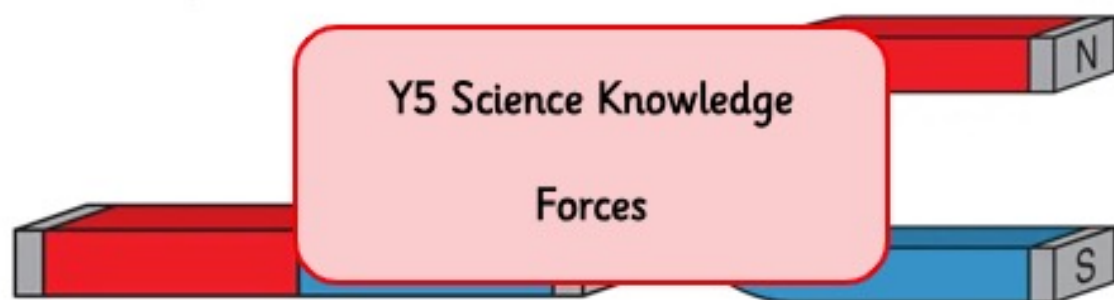


**As part of this unit children will know:**

- Describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- Describe the movement of the Moon relative to the Earth
- Describe the Sun, Earth and Moon as approximately spherical bodies
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky

**Key Vocabulary**

Sun, Moon, Earth, planets (Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune), spherical, Solar System, rotate, star, orbit



**As part of this unit children will know:**

- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- Identify the effects of air resistance, water resistance and friction that act between moving surfaces
- Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect

**Key Vocabulary**

Force, gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, leers, pulleys, gears