



EARLY YEARS UNDERSTANDING THE WORLD:

SCIENCE INTENT

In Early Years we support children's thrill of discovery and their instinctive desire to know, understand and find out more by:

- Providing freedom to explore, investigate and experiment using the five senses.
- Nurturing children's curiosity about how and why things work and how things change.
- Encouraging questioning, testing out of ideas and drawing conclusions.
- Fostering children's excitement and pleasure in the wonder of natural phenomenon.

Knowledge

Living things

I know...

- Internal and external body parts in humans.
- The names of the different parts of plants and animals.
- The features of plants and animals.
- Living things can be sorted into different groups.
- What living things need to survive.
- How to keep healthy.
- About life cycles.

Materials

I know...

- What objects are made from.
- The properties of different materials.
- How different materials can be used.
- Materials can be sorted into different groups.

Changes

I know...

- Changes can be reversible and irreversible.
- The relationship between cause and effect.
- The characteristics of the four seasons.
- The characteristics of different weather types.

Skills

I am learning to...

Explore • Investigate • Observe • Compare • Describe • Ask questions • Communicate ideas • Face challenges • Solve problems • Try things out • Test ideas • Make predictions • Record • Draw conclusions • Sort and classify • Measure.

IMPLEMENTATION

Science is valued and promoted through direct teaching and purposeful learning opportunities across different themes throughout the year.

We use planned themes and unplanned moments that present themselves, to talk about living things, materials and changes. These include natural objects, new life and recycling.

For each theme we have identified the scientific knowledge and skills that we will teach ensuring that knowledge and skills are regularly revisited.

We cover the following themes:

- Me, Myself and I and New Life Topics: through these topics children will learn about changes and living things.
- Seasons and Weather: through these themes, children will learn about changes and materials.
- New Life: through this topic children will learn about changes and living things.
- Minibeasts through this topic children will learn about living things and materials.

Opportunities are also provided for children to practise and apply scientific knowledge and skills through investigation and exploration in all areas of the provision. An investigation area is resourced with a range of scientific equipment and materials which offer opportunities for children to observe, investigate, explore and experiment.

Adults know the characteristics of a good scientist. They model technical language and scientific behaviours and attitudes encouraging children to ask questions, test out ideas, carry out investigations and draw conclusions.

IMPLEMENTATION

By the end of Foundation Stage I can...

- Talk about the properties of materials.
- Make a sensible prediction.
- Record findings.
- Observe, notice and make comparisons.
- Talk about the characteristics of weather and seasons.
- Name the parts of plants and animals.
- Talk about similarities and differences.
- Draw conclusions.
- Talk about reversible and irreversible changes.
- Carry out an investigation.