

Year 2
Autumn
Science

Materials and their uses

In science this term, children will develop their understanding of materials and their properties. They will be investigating, observing and evaluating. They will be experimenting with different materials to explore the properties they have.

Background information

Materials are what things are made from. We will be learning about the variety of different materials and investigating their individual properties. Children will be challenged to consider the suitability of different materials for a specific purpose, depending on their properties. We will be performing various investigations to deepen our understanding of materials and their properties, having planned a test and made predictions. We will ensure it is a fair test, then examine our results and draw our conclusions. We will investigate properties such as water resistance, absorbency and flexibility.

Knowledge and Understanding

In this unit pupils will learn;

- about the materials things around us are made from.
- the difference between natural and man-made materials.
- to sort materials into groups with similar properties.
- to understand different properties of materials
- to explain the suitability of different materials for a purpose.
- To understand the importance of recycling

Enquiry skills and Key concepts

- Use evidence to compare materials and talk about what they have found out and how they found it out.
- To be able to suggest what might happen to a material when it is changed in a certain way.
- Describe what they can see happening to the materials.
- Plan to perform simple tests on different materials to observe what might happen.
- Present findings in simple tables, diagrams, pictograms, sorting circles, bar charts and templates.
- to interpret the results of an investigation.

Key Vocabulary:

wood, paper, metal, fabric, glass, plastic, cardboard, rubber, brick

Material – what objects are made from

Properties – what a material is like and how it behaves

Natural – already exists in nature

Man-made – created by humans

Squash – press together

Bend – take the ends of an object and pull them together

Twist – turn the ends in different directions

Stretch – pull each end apart slowly

Waterproof – does not absorb moisture

Absorbent – soaks up water

Flexible – bendy

Transparent – see-through

Opaque – not see-through

Hardwearing – not easy to break, tough

Fragile – easily breakable