

Knowledge Organiser

Science

Year 2

Summer 2

Materials

Previous learning:

- Senses, feeling things (EYFS – Autumn 1)
- Changes in state (EYFS – Autumn 2 and Spring 1)
- Exploring materials (EYFS – Summer 2)
- Materials (Year 1 – Spring 2)

Key Vocabulary

suitability,
stretch,
flexible,
rigid,
John McAdam,
Charles Macintosh

Objectives

taken from Progression Document

Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.

Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Some materials can be found naturally; others have to be made.

Key Knowledge

All objects are made of one or more materials that are chosen specifically because they have suitable properties for the task.

Understand that some materials can be changed.

Understand the suitability of materials for different objects.

Identify and compare materials.

Working Scientifically

TAPS Assessment (Choose most suitable)

Materials: Rocket Mice

Do: Perform simple tests to answer questions

Concept context

Can link to materials (properties, uses, changing shape) or forces

TAPS Assessment (Choose most suitable)

Materials: Boat

Describe what they have found out and use their results to make comparisons

Concept context

Properties of materials relating to their uses

TAPS Assessment (Choose most suitable)

Materials: Waterproof

Plan: Ask simple questions and recognise that they can be answered in different ways

Concept context

Use knowledge and understanding of properties of materials to compare suitability for different uses

Possible opportunities:

Classifying

- Based on the children's own criteria, classify materials e.g. samples of wood, metal, plastic, etc.

Comparative/Fair Testing

- Test materials for different uses (e.g. Which material can you use to make an aeroplane? Which fabric would you use for curtains? Which materials are best for Cinderella's mop? Which fabric would you choose for Elastigirl's costume? Which paper can be used for a book, fabrics for a child's dungarees, materials for aeroplanes etc?)