National Curriculum:

Y2 pupils should be taught to:

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

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

Subject: Science

Year 2

Materials

Context:

Children are naturally curious about their world, making observations and asking questions. This unit draws on this curiosity finding out about the world around them and what it is made of, and how humans can use natural resources to better their environment.

Sticky Knowledge:

Know the difference between an object and the material it is made from (1)

Know the simple properties of everyday materials (2)

identify and compare the uses of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses (2)

To know what prediction means in terms of an investigation (3/4)

To be able to report an observation from an investigation (3./4)

Prior Knowledge:

In EYFS, pupils will have: Explored different materials freely, to develop their ideas about how to use them and what to make.

Developed their own ideas and then decide which materials to use to express them.

Joined different materials and explored different textures.

Used all their senses in hands-on exploration of natural materials.

Explored collections of materials with similar and/or different properties.

Misconceptions:

Only fabrics are materials

Only building materials are materials

Enquiry Questions:

1) What is the difference between objects and materials?

2) Are certain materials best to be used for certain objects?

3) Which material is best for a boat?

4) What happens to the object when I apply force?

Working Scientifically:

<u>Comparative testing</u>

- When appropriate measure using standard units (3)
- Record data in simple prepared tables, pictorially or by taking photos.(3)
- Present what they have learnt verbally, using pictures or block diagrams.(3,4)
- Answer their question in simple sentences using their observations (3,4)

Key Vocabulary:

material

plastic

glass

object

solid

wood

metal

rock

property

Enhancements:

Link to toy topic – how materials have changed over time.

Visit from an engineer or carpenter (DT link)