## Year 1 - Everyday materials (biology, chemistry, physics)

## NC objectives

- distinguish between an object and the material from which it is made
- identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
- describe the simple physical properties of a variety of everyday materials
- compare and group together a variety of everyday materials on the basis of their simple physical properties.


## Prior learning

- Use all their senses in hands-on exploration of natural materials. (Nursery - Materials, including changing materials)
- Explore collections of materials with similar and/or different properties. (Nursery - Materials, including changing materials)
- Talk about the differences between materials and changes they notice. (Nursery - Materials, including changing materials)


## Key vocabulary

Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not seethrough

## Future Learning

- Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. (Y2-Uses of everyday materials)
- Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. (Y2 Uses of everyday materials)


## Common misconceptions

Some children may think:

- only fabrics are materials
- only building materials are materials
- only writing materials are materials
- the word 'rock' describes an object rather than a material
- 'solid' is another word for hard.


## Areas of enquiry

- Observation over time - what happens to materials over time if we bury them in the ground?
- Comparative and fair testing - test the properties of objects, e.g. absorbency in cloths, stiffness of paper plates, waterproofness of shelters
- Identifying and classifying - classify materials based on their properties, classify objects made of one material in different ways, classify in different ways one type of object made from different materials e.g. spoons.
- Pattern seeking - is there a pattern in the types of materials that are used to make objects in school?
- Researching using secondary sources - which materials can be recycled?


## Hook suggestions

## Books

The Three Little Pigs (Traditional story)
Three Little Wolves and the Big Bad Pig by Eugene Trivizas

## Scenarios

Scenario - Fiona wants to go on a material hunt and look for all the things that are made from the same material. She chooses wood. Jane decides to do the same thing, but she's looking for things made from metal. (Identifying and classifying)
Scenario - Little Red Riding Hood keeps getting wet when she walks through the forest to Grandma's house. (Comparative testing)

