



**Year**

**1**

**Topic**

**Everyday materials**

- 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**

- Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes. (Early Learning Goal)

**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)

**WHAT PUPILS NEED TO KNOW OR DO TO BE SECURE**

**Show understanding of a concept using scientific vocabulary correctly**

**Key learning**

All objects are made of one or more materials. Some objects can be made from different materials e.g. plastic, metal or wooden spoons.  
Materials can be described by their properties e.g. shiny, stretchy, rough etc. Some materials e.g. plastic can be in different forms with very different properties.

**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 see-through

**Possible evidence**



brick



fabric



plastic



wood



paper



stone



metal



glass

## 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.

**Apply knowledge in familiar related contexts, including a range of enquiries**

Activities	Possible evidence
<ul style="list-style-type: none"> <li>• Classify objects made of one material in different ways e.g. a group of object made of metal.</li> <li>• Classify in different ways one type of object made from a range of materials e.g. a collection of spoons made of different materials.</li> <li>• Classify materials based on their properties.</li> <li>• Test the properties of objects e.g. absorbency of cloths, strength of party hats made of different papers, stiffness of paper plates, waterproofness of shelters.</li> </ul>	<ul style="list-style-type: none"> <li>• Can sort objects and materials using a range of properties</li> <li>• Can choose an appropriate method for testing an object for a particular property</li> <li>• Can use their test evidence to answer the questions about properties e.g. "Which cloth is the most absorbent?"</li> </ul>

### Key Vocabulary

<b>object</b>	A thing that can be used. For example a door, chair, car, table are all <b>objects</b> .
<b>material</b>	<b>Materials</b> are what an <b>object</b> is made from.
<b>hard</b>	Not easily broken or bent.
<b>soft</b>	If something is <b>soft</b> , it is easy to cut, fold or change the shape of.
<b>stretchy</b>	Can be pulled to make it longer or wider without breaking.
<b>shiny</b>	Reflects light easily.
<b>dull</b>	Doesn't reflect light. Doesn't look bright or <b>shiny</b> .
<b>rough</b>	If something is <b>rough</b> , it feels and looks uneven or bumpy.

### Key Vocabulary

<b>smooth</b>	<b>Smooth objects</b> have no lumps or bumps.
<b>bendy</b>	<b>Bendy</b> things can be <b>bent</b> easily into a curved or folded shape.
<b>not bendy</b>	If something is <b>not bendy</b> , it can't be bent easily into a curved or folded shape.
<b>waterproof</b>	If something is <b>waterproof</b> , it keeps water out. It keeps things dry.
<b>not waterproof</b>	<b>Not waterproof materials</b> let water in.
<b>absorbent</b>	If something is <b>absorbent</b> , it soaks liquid up.
<b>not absorbent</b>	If something is <b>not absorbent</b> , it does not soak up liquid.
<b>transparent</b>	<b>Transparent objects</b> can be seen through.
<b>opaque</b>	<b>Opaque objects</b> can't be seen through.