

## Science

## Uses of Everyday Materials

## Year 2

## Summer 2

### Key Knowledge

#### Properties and Uses of Materials

Wood	Hard, stiff, strong, opaque, can be carved into any shape. Can be used for doors, tables and fences.
Metal	Strong, hard, easy to wash. Can be used to make coins, cans and cars.
Plastic	Waterproof, strong, can be made to be flexible or stiff, smooth or rough. Can be used for bottles, pens and rulers.
Glass	Waterproof, transparent, hard, smooth. Can be used for windows, mirrors, glasses and windscreens.
Brick	Rigid, strong, dull, rough. Can be used for houses and walls.
Rock	Hard, strong, dull. Can be used for garden walls and old buildings.
Paper	Lightweight, flexible. Can be used for school books and wrapping paper.
Cardboard	Strong, light, stiff. Can be used for boxes and drink cartons.
Rubber	Hard-wearing, elastic, flexible, strong. Can be used for tyres, elastic bands, balloons and soles on shoes.

### Statutory requirements

- 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.

### Key Vocabulary

Materials	Materials are what objects are made from.
Properties	This is what a material is like and how it behaves (soft, stretchy, waterproof).
Squashing	Crushing something so it becomes flat, soft or out of shape.
Bending	Changing a straight object so that it is curved.
Twisting	Changing the state of an object by turning it.
Stretching	Made longer or wider without tearing or breaking

### Pictures and Diagrams



### Possible Experiences

- Compare the uses of everyday materials in and around the school with materials found in other places (at home, the journey to school, on visits, and in stories, rhymes and songs).
- Observe closely the uses of different materials, and record your observations.
- Distinguish between absorbent and waterproof materials. Discuss what happens when water is placed on these materials.
- Consider why some properties of materials make them suitable or unsuitable for different uses. Investigate if some items can be made by more than one material (e.g. cutlery) and explain why.
- Discuss which materials are recyclable and why. Follow the recycling process.
- Investigate how some objects can be changed by squashing, bending, twisting and stretching.
- Find out about people who have developed useful new materials, for example John Dunlop, Charles Macintosh or John McAdam.