



What should I Know by the end of the unit?

- 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.



What should I already know how to do?

- 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.

Key Vocabulary

| Word | Definition |
|-----------------------------|--|
| Rigid | Not easily bent or moved |
| Squash | Crush or squeeze with force so that something becomes flat, soft, or out of shape. |
| Hard | Not easily broken or bent. |
| Waterproof | Doesn't allow water to pass through it. |
| stretchy | Something that can be pulled into a new shape without breaking. |
| Shiny / Dull | Reflects light easily. Doesn't reflect light. Doesn't look bright or shiny. |
| Transparent | Able to be seen through |
| Opaque | Not able to be seen through |
| Reflective/ non- reflective | Capable of reflecting light. Not being able to reflect light. |
| Translucent | Allowing light, but not detailed shapes to pass |



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Key Knowledge

Explain why a material might or might not be used for a specific job

Explain how materials can be changed by squashing, bending, twisting and stretching.

All objects are made of one or more materials that are chosen specifically because they have suitable properties for the task. For example, a water bottle is made of plastic because it is transparent allowing you to see the drink inside and waterproof so that it holds the water.

When choosing what to make an object from, the properties needed are compared with the properties of the possible materials, identified through simple tests and classifying activities.

A material can be suitable for different purposes and an object can be made of different materials.

Objects made of some materials can be changed in shape by bending, stretching, squashing and twisting. For example, clay can be shaped by squashing, stretching, rolling, pressing etc

| Pre and Post Assessment | | |
|---|-------------------------|--------------------------|
| Question | Pre Assessment response | Post Assessment response |
| Why a material might or might not be used for a specific job | | |
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