

Willerby Carr Lane Primary School - Science

Topic: Materials

Year: 1

Strand: Chemistry

What should I already know?

- Identify and name different materials. (wood, metal, plastic, glass, rock)
- Describe the simple properties of everyday materials.
- identify which materials have certain properties.
- Sort objects by their properties
- Test materials in simple ways, e.g. is it waterproof?

What will I know by the end of the unit?

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| Which materials are the things around me made from? | Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. An object and the materials it is made from are different e.g. a glass is made of glass but so is a bottle. |
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| How can I describe what the materials are like? (the properties of materials) |  |
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| How can I compare and group materials using their physical properties? | Describe the simple physical properties of a variety of everyday materials using the vocabulary above. Compare and group together a variety of everyday materials based on their simple physical properties e.g. waterproof, transparent, bendy. |
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Vocabulary

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| absorbent | material that soaks up liquid easily |
| bendy | an object that bends easily into a curved shape |
| brick | rectangular blocks of baked clay used for building walls, which are usually red or brown |

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| dull | A colour or light that is not bright |
| elastic | a rubber material that stretches when you pull it and returns to its original size and shape when you let it go |
| fabrics | cloth or other material produced by weaving together cotton, wool or other threads. |
| foil | sheets of metal as thin as paper |
| glass | a hard transparent material |
| man-made | things are created by people |
| metal | a hard substance such as iron, steel, gold, or lead |
| natural | things that exist in nature and are not made by people |
| opaque | if an object or substance is opaque, you cannot see through it |
| plastic properties | a material which is light in weight and does not break easily a property is a quality of something like strength, stretchiness or absorbency that make them useful for different jobs |
| rock | the hard substance which the Earth is made of |
| rough | uneven and not smooth |
| shiny | things are bright and reflect light |
| smooth | no roughness, lumps, or holes |
| soft | not rough or hard |
| stiff | firm or does not bend easily |
| stretchy | slightly elastic |
| transparent | If an object is transparent, you can see through it |
| waterproof | does not let water pass through it |
| wood | the material which forms the trunks and branches of trees |

Investigate!

- Identifying and naming materials.
- Distinguishing between an object and a material by sorting everyday objects and materials and comparing these.
- Describing the properties of everyday materials.
- Comparing and grouping materials by considering their properties.
- Testing properties to see if they are bendy/not bendy, transparent/opaque.
- What is the best material for an umbrella?

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.