

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?

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.

How can I describe what the materials are like? (the properties of materials)



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.

Vocabulary

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

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.