

Key Learning – Materials

Year 1 Science – Autumn 2

National Curriculum

Everyday Materials:

Pupils should be taught to:

- 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

Working Scientifically

During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions.

Images and key questions

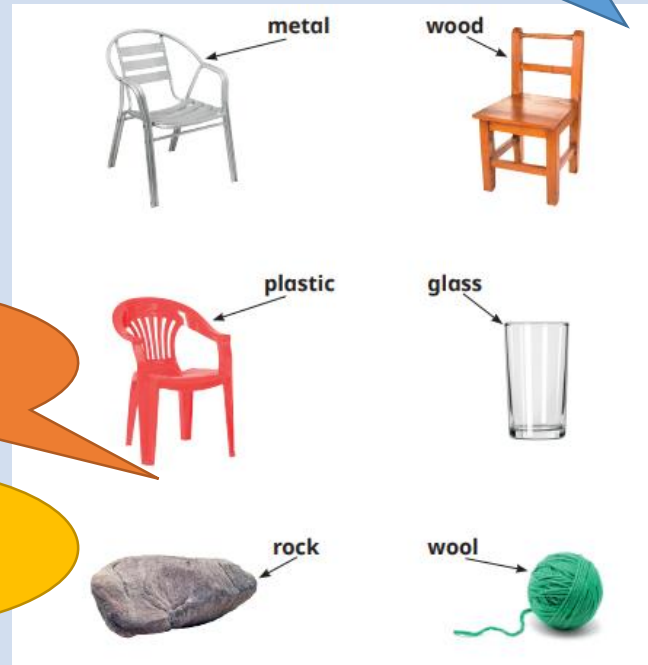


What does "transparent" mean? What does "opaque" mean?

What happens to water when it is put in the freezer?



What material is this? How can we describe this material?



Why do you think these objects will float or sink? Do you think this material will absorb water?

Which material would be the best for a pair of curtains?

Vocabulary

object – something that can be seen and touched

material – what an object is made from

melt – when a solid changes to a liquid

freeze – when a liquid changes to a solid

ice – when water freezes

float – when an object stays on top of the water

sink – when an object falls to the bottom of the water

absorb – when liquid is taken in by a material

transparent – a material that can be seen through

opaque – a material that cannot be seen through

soft – a material that can easily change shape or is gentle to touch

hard – not easily broken or bent

shiny – a smooth surface that can reflect light easily

dull – not clear, bright or shiny

This term the children are learning about everyday materials. They will be investigating which material would be best for an umbrella for Teddy as well exploring the properties of materials. They will also investigate which materials would work best for curtains. The children will be completing some of these sessions at forest school and some during classroom time.

1	<p>What happens in Autumn?</p> <p>Seasonal Change - The children will spend the forest school sessions looking for signs of Autumn and collecting leaves to make trees. The children will learn that days are becoming shorter for daylight hours. Some trees begin to lose their leaves and the weather begins to change.</p>
2	<p>What is a material?</p> <p>The children will be learning how to identify and name a variety of everyday materials including wood, metal, plastic, glass, water and rock. They will match different materials to the name.</p>
3	<p>What materials are objects made from?</p> <p>The children will learn to distinguish between an object and the material from which it is made by naming objects and identifying the material which they are made from. They will also be learning about the properties of everyday materials and how we can distinguish between an object and the material from which it is made by looking and touching different materials.</p>
4	<p>Why do Ice creams melt?</p> <p>Children should be given the opportunity to work practically throughout this small step to observe how some materials melt and freeze. The children should identify that water needs to be frozen to turn to ice and ice needs to be heated up to melt.</p>
5	<p>Which is the best material to use for an umbrella?</p> <p>The children will be learning about which materials will float and which will sink. The children will make predictions and test this in groups. The children will also be learning about which materials absorb water. They will conduct an experiment to find out which material will be best to use for an umbrella and why.</p>
6	<p>Which is the best material to use for a pair of curtains?</p> <p>The children will be investigating which materials are transparent and opaque. The children will be finding out which material would be best used as a pair of curtains for our teddy. They will learn about conducting a 'fair test' and how they can record the findings.</p>