



Science Knowledge Organiser

Year: 1/2 Term: 2 and 3

Topic: Uses of everyday materials



Prior knowledge/key knowledge

Prior knowledge from Year 1 Identify and name a variety of everyday materials. Distinguish between an object and the material from which it is made. Describe the simple physical properties of a variety of everyday materials. Compare and group a variety of everyday materials on the basis of their simple physical properties.

Key knowledge for Year 1/2

identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses

Some materials are better suited to be used for certain objects than others. Some objects can be made from a variety of materials i.e. spoons can be made from plastic, metal, wood.

find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

When objects are squashed, bent, twisted and stretched, some will change shape and others will not. Some return to the original shape and others do not.

Find out about John McAdam.

John McAdam invented a revolutionary road building technique. Previously, roads were muddy or bumpy and dangerous. He used large stones at the bottom and small stones and gravel on the top, to make them strong and smooth. He used curved edges so that water ran off reducing

Vocabulary

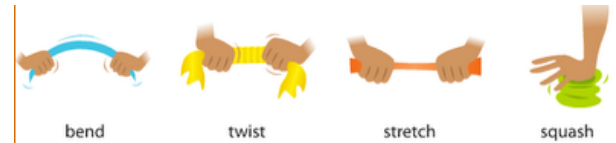
Object	Something that can be seen or felt.
material	What an object is made from.
property	Helps us to describe a material.
Suitable	How well it works.
Wood	Hard, rigid, strong, opaque, burns.
Metal	Strong, hard, bendy, shiny, magnetic, waterproof
plastic	Waterproof, strong, can be made into different shapes, can be rough or smooth, can be opaque, transparent or see through.
glass	Waterproof, transparent, hard, rigid, smooth, fragile.
brick	Strong, hard, rigid, waterproof, opaque
rock	Strong, hard, rigid, opaque
paper	Light, flexible, opaque, absorbent, burns
cardboard	Strong, light, rigid, burns
fabric	Soft, flexible, can be stretchy, absorbent
rubber	Flexible, waterproof, strong, opaque
squash	Push both ends together
bend	Bring both ends towards each other to make a curve shape
twist	Turn the ends in opposite directions
stretch	Pull ends away from each other

Key skills /investigative focus

Investigative focus Which objects can be squashed, twisted, stretched and bent to change their shape

Observing closely

Recording their observations.



Big Questions/Challenging Perceptions



What would happen if all materials were stretchy.

Common Misconceptions

Only fabrics are materials

Only building materials are materials