

Knowledge Organiser

Year Group	Subject	Topic
2	Science	Materials

The Big Picture

Children will identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. They will also find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Enquiry Question

What is the best material for an umbrella?
How can we change the shape of an object?
What materials do we find in our everyday lives?

Key Vocabulary

Material	The matter from which a thing is or can be made.
Properties	A feature of an object, such as elastic, flexible, waterproof, rigid.
Absorbent	Able to soak up liquid easily.
Waterproof	Materials that do not let water through
Bend	A curve or angle put into an object by shaping or applying force to it.
Rigid	Materials that are stiff and hard to bend.
Brittle	Hard but likely to break easily.
Change	Made or becoming different.
Flexible	Materials that can bend easily.
Concrete	A building material made from a mixture of broken stone or gravel, sand, cement and water. Concrete can be spread or poured and looks like stone when it is dry.
Dull	Lacking in brightness, vividness or sheen.
Elastic	Able to stretch and then return back to their original shape
Fabric	Cloth produced by weaving or knitting textile fibres.
Glass	A hard, brittle substance (usually transparent or translucent) made by fusing sand with soda lime and cooling rapidly.
Hard	Solid, firm and rigid; not easily broken, bent or pierced.

Key Vocabulary

Made Materials	Materials that come from natural materials but have been changed
Natural Materials	Materials that come from animals, plants or rocks.
Metal	A shiny material which transfers (conducts) heat well and is usually a solid (at room temperature).
Opaque	Not able to see through (not transparent).
Transparent	A material allowing light to pass through so that objects behind can be seen clearly.
Paper	Material manufactured in thin sheets from the pulp of wood or other fibrous substances
Recycle	To make use of an object or material multiple times
Rough	An uneven or irregular surface; not smooth or level.
Texture	The feel, appearance or consistency of a surface or a substance
John Boyd Dunlop	A Scottish veterinary surgeon who developed the design of pneumatic tyres commonly used on many motorised vehicles today.
Pneumatic	Containing or operated by air or gas under pressure.

Made materials	Natural materials	Elastic materials	Flexible materials	Absorbent materials
paper plastic iron bronze ceramic rubber glass	wood gold diamond coal leather cotton stone wool wax	rubber elastic bands spring	fabric plastic rubber	fabric paper