

How do you know something is good?

SCIENCE



National Curriculum Links:

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

Essential Prior Learning:

Recognise and name some common materials, e.g. wood, metal, plastic, fabric.
Describe some simple properties of known materials, e.g. hard, soft, dull, shiny.

Progression in Skill:

Identify and compare the suitability of a variety of everyday materials for particular uses: wood, metal, plastic, glass, brick, rock, paper and cardboard.
Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Working Scientifically

Use secondary sources to find information and answer questions such as books, photographs and videos.

Begin to recognise the different ways you might answer scientific questions.

Use simple features to compare objects, materials and living things.

Decide how to sort, group, identify and classify materials and living things.

Use simple equipment and measurements to gather data such as hand lenses and metre sticks.

Observe closely.

Gather and record data in a simple T-grid to help answer questions.

Long-term Memory Knowledge:

Identify how every day materials are suitable for different purposes.

Demonstrate how squashing, bending, twisting and stretching can change the shape of some solid objects.

Understand that information and answers to questions can be found in different ways and name some of these.

Understand that different materials can be compared based on their properties.

Demonstrate how to use simple equipment to gather data.

Use a t-grid to organise data you are recording.

Key Vocabulary

suitable	the material is right or appropriate for a particular purpose, or situation
solid	a firm object
squash	crush or squeeze something out of shape
bend	shape something into a curve

twist	change the shape of something by holding each end and turning
stretch	make longer or wider without breaking or tearing
absorbent	soak up liquid easily
waterproof	keeps out water

Progression in Resources:

results tables and graphs
metal
plastic
brick
cotton
rock

Relevance

Now	Children have an understanding of why certain materials are chosen to make particular products; they recognise that some are more suitable than others; this knowledge can be applied to their own lives in and out of school, for example through a DT project or deciding which shoes to wear when it is raining.
Future	Use knowledge of the properties of everyday materials to make decisions about products they purchase/use.
Aspiration	Use knowledge of materials to design products – either as a career or for personal use and pleasure, e.g. carpenter, jeweller. Develop new materials for particular purposes as the world and its needs continue to develop.