

Year 2: Materials Autumn | Year A

What should I already know?

Distinguish between an object and the material from which it is made.

Identify and compare the suitability of a variety of everyday materials.

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.

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

Key Vocabulary

material	what an object is made from
natural	a material that comes from animals, plants or the Earth
material	
human-made	a material made by people
material	
recycle	to change rubbish into a material that can be used again
smooth	an even surface
rough	an uneven surface
flexible	can change shape easily
rigid	cannot change shape easily
rock	a natural material found on or underneath the Earth's surface
stone	a small rock
pebble	a small, smooth rock that has been shaped by water
brick	a human-made building material
brittle	easily broken
flexible	can change shape easily
transparent	materials you can see through
translucent	materials that you cannot easily see clearly through

I am learning to...

- Name the object and the material it is made from
- Identify and names a variety of everyday materials including wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic and foil
- Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses

opaque
shiny
dull
fabric
independent variable
dependent variable
controlled variable
waterproof
lightweight

materials you cannot see through
a surface that can reflect light easily not clear, bright or shiny
a material made from weaving or knitting threads together
what will change
what will be measured
what is kept the same
does not allow water to pass through it
thin and light

Scientific diagrams



Key misconceptions

Some children may believe that a material is something used for clothing.
Some children may believe that bricks are rocks.

Key skills - working scientifically

Identifying and classifying
Perform simple tests
Asking simple questions and recognising that they can be answered in different ways
Observing closely, using simple equipment
Using their observations and ideas to suggest answers to questions

Key scientists

Charles Macintosh (1766-1843) Chemist and inventor of waterproof clothing.



What will I be learning next?

Compare and group together different kinds of rocks
Describe in simple terms how fossils are formed
Recognise that soils are made from rocks and organic matter.
Compare and group materials together, according to whether they are solids, liquids or gases.
Observe that some materials change state