

In this unit: Pupils will investigate the different materials and their properties. They will use their findings to help Sir Winalot decide which materials he should use to build his castle.

Children should already know:

- that objects feel and look different based on the material they are made from
- that some materials can be changed
- that there are some materials have the same properties
- that some materials can be manipulated to a planned effect
- the name of some everyday materials
- some simple physical properties of everyday materials

At the end of this unit, children will know:

- that objects are things that you can touch or see.
- that objects are made from materials and can name many of these materials.
- that some materials are natural and some are man-made.
- the properties of everyday materials.

Pupils could investigate:

- sorting natural and man-made objects.
- whether materials will defend the castle from different attacks
- what the best materials for [part] are

Key Questions:

- what words can I use to describe...?
- is [material] man-made or natural?
- which materials would I use for wheels? why?
- what properties do I need my [window] to have?
- why is [material] not a good material for [purpose]?

OPPOSITES



Key Vocabulary

absorbent	material that soaks up liquid easily
dull	a colour or light that is not bright
glass	a hard, transparent material
hard	cannot easily be squashed, bent, cut or scratched
man-made	things that are created by people
material	the thing that something is made from
metal	a hard substance such as iron, steel, gold or lead
natural	things that exist in nature and are not made by people
opaque	an object or liquid that you cannot see through
plastic	a material which is light in weight and does not break easily
properties	what a material looks like, feels like or how it behaves
rock	the hard substance which the earth is made of
rough	uneven and not smooth
shiny	things are bright and reflect light
smooth	no roughness, lumps or holes
soft	can be easily squashed, bent, cut or scratched
stiff	is firm and does not bend easily
stretchy	something that is slightly elastic
strong	cannot easily be broken or changed
transparent	an object or liquid that you can see through
water	a clear liquid that we drink and comes out of the tap
waterproof	does not let water pass through it
weak	can be easily broken or changed
wood	the material which forms the trunks and branches of trees