

Merry Hill Infant School and Nursery - Knowledge organiser



Science

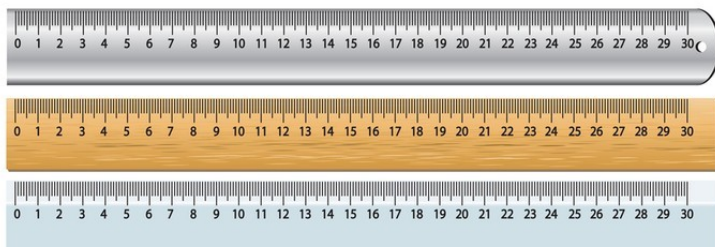
Topic: Properties and Uses of Materials

Year Group : 2





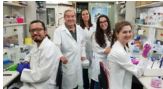

Term: Autumn 2

Key Knowledge

What are materials used for?	<ul style="list-style-type: none"> • Metal can be used to make coins, cans, cars and table legs. • Wood can be used to make matches, floors and furniture. • Glass can be used to make windows and cups.
Are materials suitable for their purpose?	<p>Glass is a suitable material for a window because it is transparent and waterproof.</p>  <p> Spoons are made from metal because it is waterproof and can be cleaned easily.</p>
Can the same object be made from different materials?	<p>Some objects can be made from different materials.</p> <ul style="list-style-type: none"> • Rulers can be made from wood, plastic or rubber because these materials are all smooth and can be cut straight.



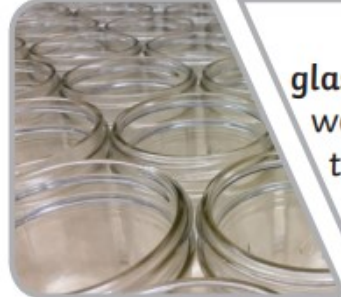
Key Vocabulary

absorb	Soak up or take something in.	
absorbent	Material that soaks up liquid easily.	
experiment	A test to answer a question.	
flammable	A material that catches fire or burns easily.	
material	What something is made from.	
opaque	A material that you can't see through and does not let any light through it.	
Properties	What a material is like and how it behaves (soft, stretchy, waterproof).	
Purpose	the reason for which it is made or done	
scientist	Someone who learns science or uses science in their job.	
suitable	Suitable means something is right for its use.	
transparent	A material that you can see through and that lets light through it.	
waterproof	Does not let water pass through it.	

Properties of Materials



wood:
hard, stiff,
strong, opaque,
can be carved
into any
shape.



glass:
waterproof,
transparent,
hard, smooth.



plastic:
waterproof,
strong, can
be made to be
flexible or stiff,
smooth or rough.



metal:
strong, hard,
easy to wash.



paper:
lightweight,
flexible.



cardboard:
strong, light,
stiff.

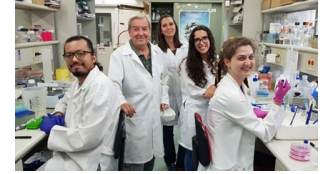


fabric:
soft, flexible,
hard-wearing,
can be stretchy,
warm, absorbent.



rubber:
hard-wearing,
elastic, flexible,
strong.

George de Mestral is a scientist. He used science to help invent the material Velcro.



When George walked his dog he noticed that burr seeds stuck to them. He looked at the burrs under a microscope and noticed that the seeds were covered in hooks. He used this idea to invent Velcro.

It took him 8 years to invent his material and lots of people didn't like his invention at first but he didn't give up.

Nasa started using his invention in space to hold things in place. This helped his material become popular around the world.



Buzz Aldrin shows off his VELCRO® Brand watch band to Neil Armstrong on Apollo 11