

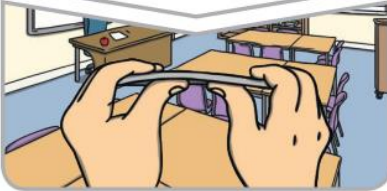
Key Stage 1 Materials and Their Properties

Key Vocabulary	
materials	Materials are what objects are made from.
suitability	Suitability means having the properties which are right for a specific purpose.
properties	This is what a material is like and how it behaves (soft, stretchy, waterproof).

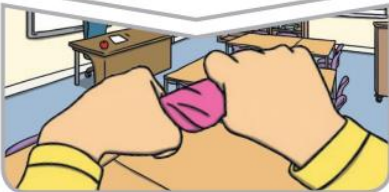
Squash an object by pushing both hands together.



Bend an object by grabbing both ends of the object and bringing the ends inwards together.



Twist an object by turning your hands in opposite directions.



Stretch an object by pulling your hands slowly and gently apart.



Key Knowledge

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.


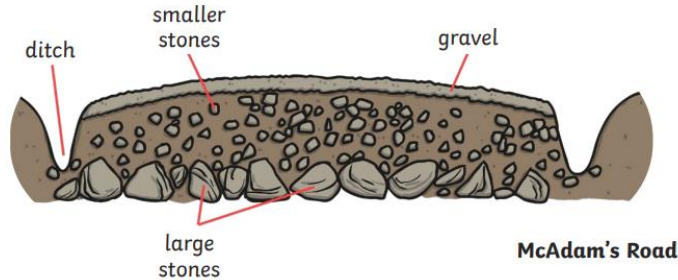


fabric:
soft, flexible,
hard-wearing,
can be stretchy,
warm, absorbent.



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

John McAdam

Key Knowledge		
John McAdam	A Scottish engineer who experimented with using new materials to build roads, inventing a new process called 'macadamisation'.	
Macadamisation	 <p>The diagram illustrates the cross-section of MacAdam's Road. It shows a ditch on the left side. The road surface is composed of three distinct layers: a bottom layer of large stones, a middle layer of smaller stones, and a top layer of gravel. The entire road structure is labeled 'McAdam's Road'.</p>	<p>The name given to John McAdam's construction process of building roads. The process was so successful that roads all across the world were built in this way. Later on roads were covered in tarmac. Tarmac means a road made like this using tar.</p>

Historical Information

Roads had been made from earth, chalk or clay. When it rained, it made them very messy and difficult to travel on. Some roads were cobbled but this made journeys very bumpy.