Jeavons Wood Primary School – Science Knowledge Organiser

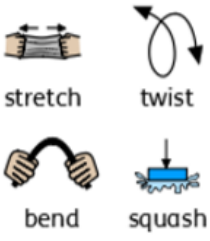
Topic: Uses of everyday Materials	**Year: 2**	**Strand: Chemistry**

Big Question: *Can any material do any job?*
Do all materials squash, bend, twist and stretch?

What should I already know?

*Objects feel/look different based on the material they are made from.
*Objects are things that you can touch or see and are made from materials.
*Some materials that objects are made from (e.g. glass, wood, plastic)
*Some words to describe materials (e.g. shiny, soft, rough absorbent)
*Materials which are natural and which are man-made.

What will I know by the end of the unit?

What are materials used for?	*Materials are used for different purposes based on their properties. *For example, wood is used to make furniture and floors. *Metal can be used to make coins, cans, cars and cutlery. *Glass can used to make windows. 
What properties of materials make them suitable for a particular use?	*Glass can used to make windows because it is transparent. *Rulers can be made from wood, plastic or rubber because these materials are smooth and can be cut straight. *Spoons are made from metal, because it is waterproof and can be cleaned easily. *They can also be made from plastic for children because plastic is light and it cannot hurt children's growing teeth. 
How can you change the shape of materials?	*The shape of some materials can be changed when they are stretched, twisted, bent and squashed. 

Vocabulary

absorbent	material that soaks up liquid easily
bendy	an object that bends easily into a curved shape
brick	rectangular blocks of baked clay used for building walls, which are usually red or brown
dull	a colour or light that is not bright
elastic	a rubber material that stretches when you pull it and returns to its original size and shape when you let it go
fabrics	cloth or other material produced by weaving together cotton, wool or other threads.
foil	sheets of metal as thin as paper
glass	a hard transparent material
man-made	things are created by people
metal	a hard substance such as iron, steel, gold, or lead
natural	things that exist in nature and are not made by people
opaque	if an object or substance is opaque, you cannot see through it
plastic	a material which is light in weight and does not break easily
process	a series of actions used to produce something or reach a goal.
properties	the qualities or features that belong to something and make it recognisable
purpose	the reason for which it is made or done
recyclable	waste or materials which can be processed and used again
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	not rough or hard
squash	pressed or crushed with such force that something loses its shape
stiff	firm or does not bend easily stretchy
stretchy	slightly elastic
suitable	something that is suitable for a particular purpose or occasion is right or acceptable for it
transparent	If an object is transparent, you can see through it
twist	turn something to make a spiral shape
unsuitable	Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it
waterproof	does not let water pass through it
wood	the material which forms the trunks and branches of trees

Where will my learning go next?

In Yr 4: Compare and group materials together, according to whether they are solids, liquids or gases.
Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C).
Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

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Question 1: The most suitable material to make windows is:	Start of unit:	End of unit:
wood		
metal		
glass		
rock		

Question 2: The reason for this is because:	Start of unit:	End of unit:

Question 3: Why do some children drink out of plastic cups rather than glass ones?	Start of unit:	End of unit:

Question 4: Stretching and twisting an object will:	Start of unit:	End of unit:
change the shape of the object		
keep the object the same		

Question 5: Match these properties of materials to the uses they are most suitable for:

Start of unit:	End of unit:

a raincoat	soft
a pillow	absorbent
a sponge	waterproof
a table	stiff