

January 5th January 2022  
Science lesson 1

This half term we are going to learning all about different materials and what they might be used for.



What do we know already about materials?

Do you know any words that can be used to describe materials?



Today we are going to complete a mini task to find out what we do know and what we might need to look at over the next few weeks. I am going to ask you some questions and you are going to fill in the boxes with the answer you think.

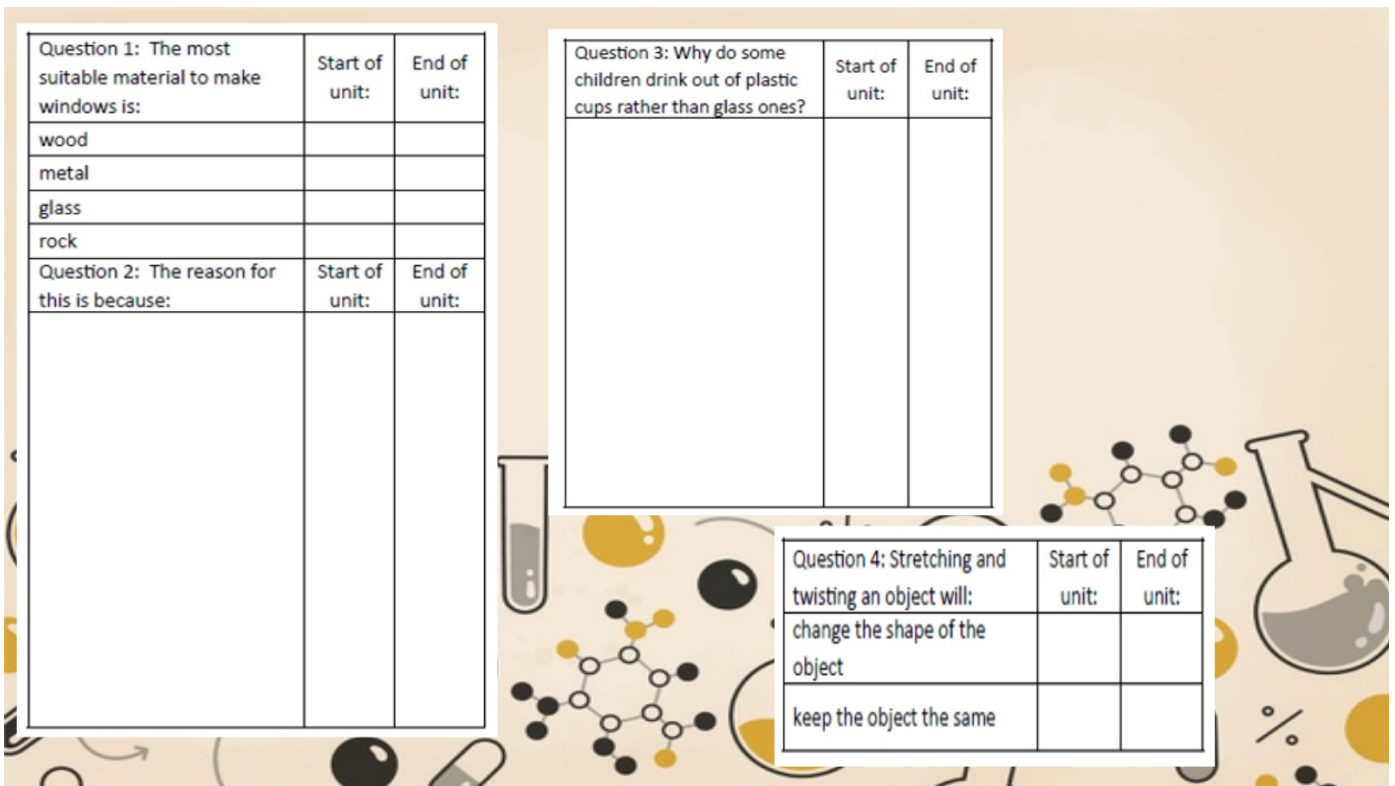
Remember you haven't learnt anything yet so don't be worried if you are not sure!! Leave it blank.



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:

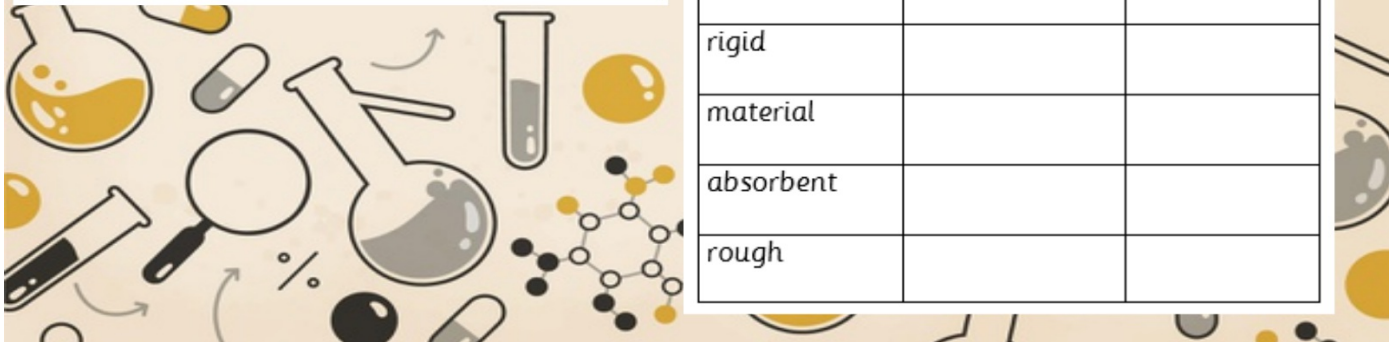
Question 3: Why do some children drink out of plastic cups rather than glass ones?	Start of unit:	End of unit:

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		

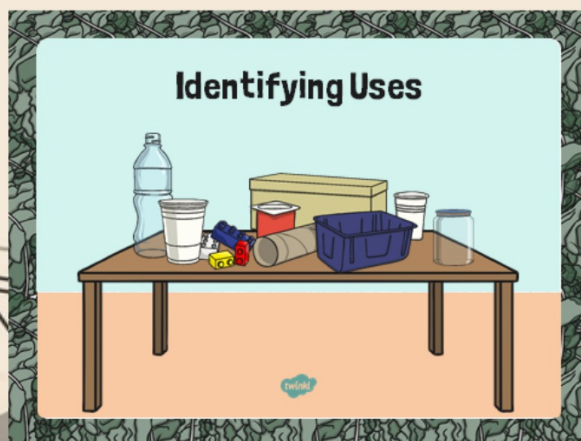
Key Vocabulary	Before	After
waterproof		
smooth		
transparent		
opaque		
flexible		
rigid		
material		
absorbent		
rough		





12th January 2022

Walt: •I can identify uses of different everyday materials.



# Materials

## What Do We Already Know?



Think back to your Science learning in Year 1. See if you can answer some of these questions with a partner:

How many everyday materials can you name and what were the materials used for?

Can you remember anything about them?

- What did they look like?
- What did they feel like?
- How did they behave?

Can you remember doing any investigations?

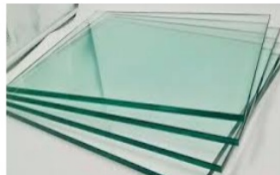
What did you find out and what did you learn?



---

## Materials

A material is what something is made from.



Some materials are natural and come from the world around us but other materials are man made because they have been altered or changed in some way.



# Glass



Can you think of 3 words to describe glass?



A natural material



Materials are used for different purposes based on their properties.

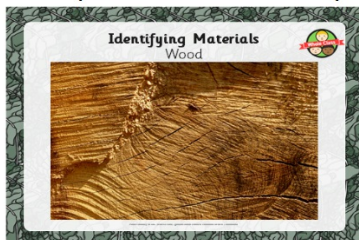


Using the material cards on your table, work as a group to record as many different uses for these materials as you can.

Can you see them in the classroom?

Do have them at home?

Can you think of anything else they could be used for?



# Identifying Uses of Everyday Materials



**Identifying Uses of Everyday Materials**

Look around you for any one of these materials (eg. wood and 2) in the table. If you have to draw for you to help you get started. Remember, some can be recycled.

Wood	Plastic	Glass	Metal	Rock	Brick	Paper	Cardboard
rule	rule		rule			books	

**Identifying Uses of Everyday Materials**

Look around you and see if you can find any one of these materials (eg. wood and 2) in the table. If you have to draw for you to help you get started. Remember, some can be recycled.

Wood	Plastic	Glass	Metal	Rock	Brick	Paper	Cardboard

**Identifying Uses of Everyday Materials**

Match the materials to their uses.

Use if you can think of your own uses for the last two materials. Draw them here and match them up.

In books

## Vocabulary

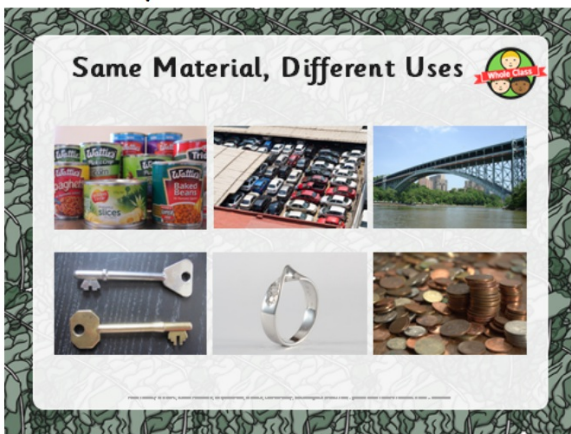
There are lots of different words that can be used to describe the properties of materials.

### Properties of Materials

<p><b>hard</b></p> <p>  A hard diamond.</p>	<p><b>squashy</b></p> <p>  The play dough is squashy.</p>	<p><b>smooth</b></p> <p>  Some smooth pebbles.</p>
<p><b>absorbent</b></p> <p>  The sponge is absorbent.</p>	<p><b>bumpy</b></p> <p>  This shell is bumpy.</p>	<p><b>opaque</b></p> <p>  She is hidden by the opaque screen.</p>
<p><b>dull</b></p> <p>  The moth's wings are dull.</p>	<p><b>brittle</b></p> <p>  The glass is brittle.</p>	<p><b>translucent</b></p> <p>  The screen is translucent.</p>

Use the pictures to help you think about what the words mean.

## Plenary



Some materials can have lots of different uses. Metal is a very strong material so is used to make a huge range of different objects.

True or false

Plastic is a material with many uses.



---

19.1.22 Walt: Compare and group materials based on their properties. .

What can you remember?



Materials

What does the properties of a material mean?

---

Match the words to the correct meaning.

waterproof

transparent

opaque

You can see  
through it

Can not see through

Does not let water  
pass through it.

---

## Meet Dougle the Dragon



Dougle likes to invent things but theres one problem...often his inventions aren't very good!!

This week Dougle wants to make a cup using his fluffy slippers!

Do you think this would be a good idea?

Help Dougle find out the properties of different materials and decide if he should use his fluffy slippers or if another material might be better.

Match the material to the correct label

Wood

Plastic

Paper

Metal

Glass

Rubber



Why are these objects together?



Properties

- |             |        |
|-------------|--------|
| bendy       | rigid  |
| flexible    | solid  |
| hard        | soft   |
| smooth      | rough  |
| transparent | opaque |
| sharp       | dull   |
| stretchy    | strong |
| waterproof  | stiff  |
| runny       | shiny  |





Walt: Compare and sort everyday materials based on their properties.


To help Dougle you will have to investigate different materials to find out some of their properties.

What properties do you think a cup needs to have?

smooth flexible rigid transparent hard waterproof bendy stretchy

---

What did you find out about the materials?

Is a fluffy slipper a suitable material to make a cup?

What would be a better material? Why?

All these objects are made from glass.



Glass can be both \_\_\_\_\_ and \_\_\_\_\_.  
It is \_\_\_\_\_ so the liquid inside can not be squashed.  
Glass is also \_\_\_\_\_ which makes it a good  
material to use as a drinking object because you can  
easily see how much you have. The most important  
reason why this material is the best is because it is  
\_\_\_\_\_. The container needs to be able  
to keep the liquid/drink inside.

rigid

transparent

delicate

strong

waterproof

Week 4 27.1.22

Walt: Identify and compare the suitability of everyday materials for particular uses.



Match the object to the best material.

umbrella



steel

bridge



glass

green house



nylon



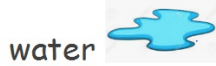
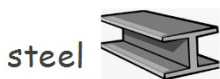
Why is steel a good choice of material for a bridge?

---

---



Circle the transparent materials.



cling film



Can you think of a silly use for a material? Why is it silly?

---

---

---

---

---



---

Help Dougle sort the statements into true and false.



Paper is made from heating sand.

Metals are made from rocks which are dug up and heated.

Plastic is useful because it can be flexible, hard, rough or smooth.

Fabric comes from plants and animals.

Glass is a good material for a chair because it is transparent.

Card is a good material to make a chair because it is waterproof.

Plastics are man made

