

Science – Everyday materials

What materials do we know?

It is heavy

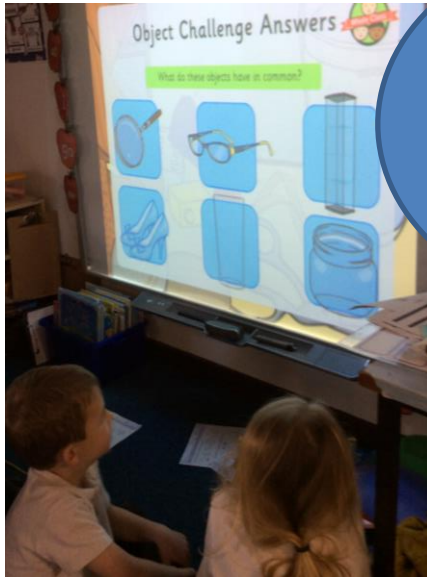


It is shiny,
hard and
cold

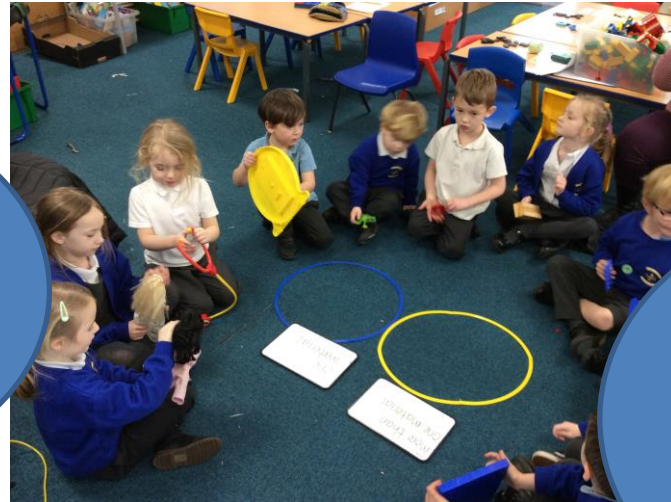
I can see through it
and it makes a
drumming sound
when I hit it



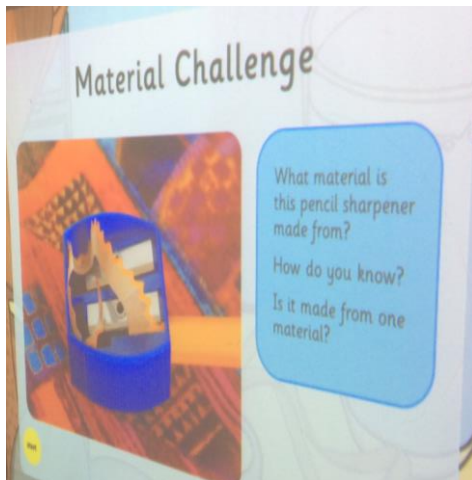
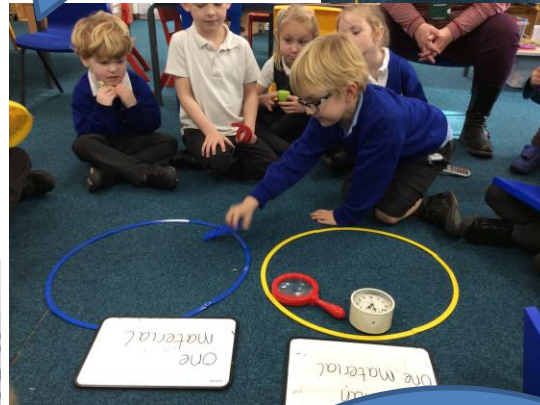
One materials or more than one material?



A window is made of glass and wood and metal for the handle.



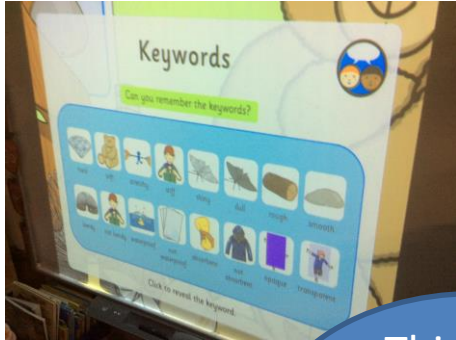
Well.. This one is more than one because it is wooden but then it has paint on it too.



This one is plastic but it has metal screws so it has more than one



Properties of everyday materials



This feels soft and fluffy. It's bendy too.

Hmm, wood is quite hard and sometimes bumpy. It is also opaque.

We used a feely bag where one person came to feel a material and describe it so we could guess.

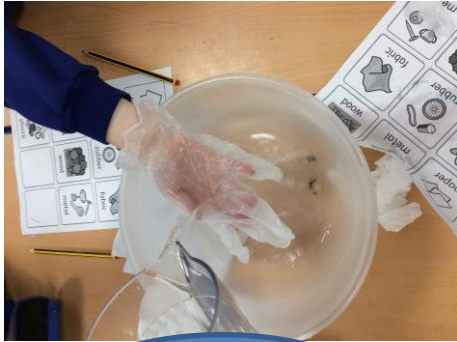


Umm, it's cold and smooth



Testing materials and their properties

The jug is transparent because I can see through it.



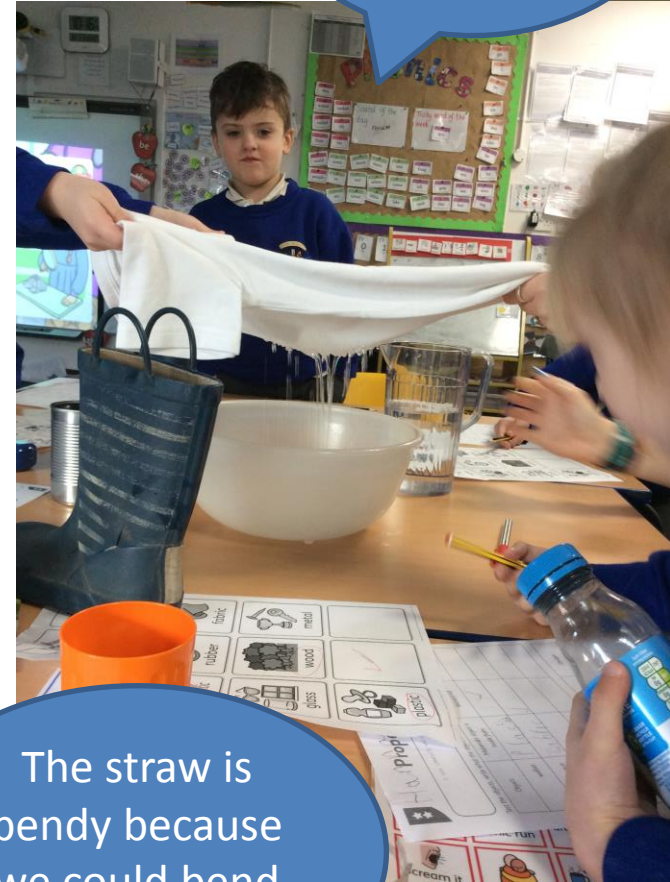
It's not waterproof because water is going through it



This is waterproof because our hand didn't get wet



The straw is bendy because we could bend it



Which material would make the best umbrella for Ted?



I'm using a pipette.

Now we need to observe closely.

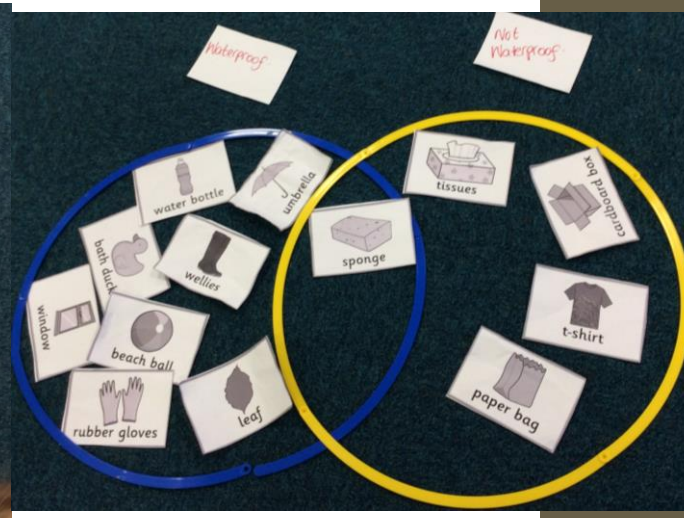
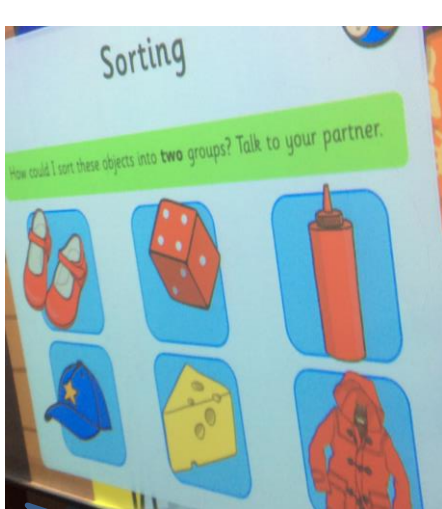
The paper is absorbent but then it is weaker so that wouldn't make a good umbrella.

Plastic is best. It's transparent and it's light and waterproof.

We chose to do 10 drops of water on each.

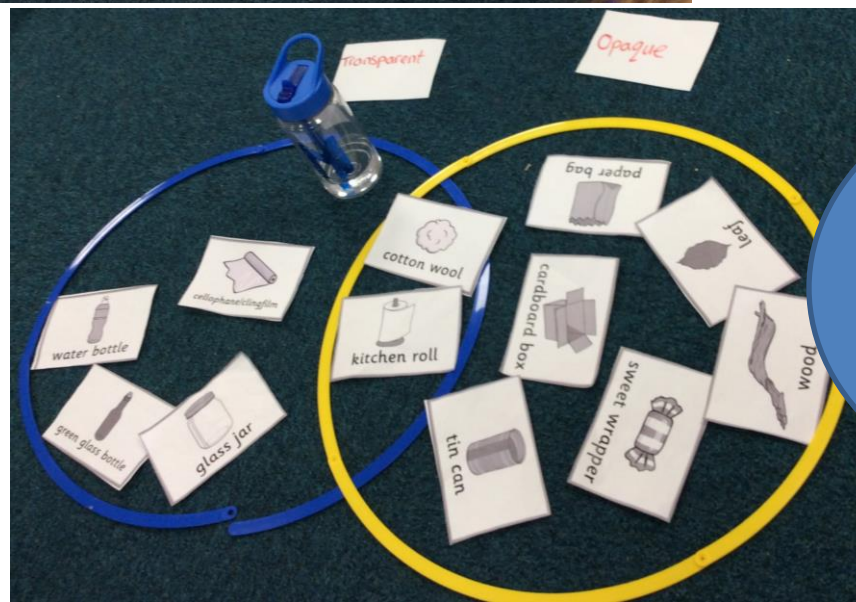


Sorting materials based on a criteria and using what we know



We could do red and not red.

I remember from our experiment that paper wasn't waterproof.



The sponge isn't waterproof but it's absorbent so I think it should go in the middle.

Material	Was the material waterproof?
1. Tissue	<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
2. Plastic bag	<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
3. Kitchen roll	<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
4. Cardboard	<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
5. Fabric	<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>



Our Endpoint

A range of items chosen by the children and sorted into sorting circles with explanations given – post-it notes and photos. Rough/smooth. Opaque/transparent. Waterproof/not waterproof.

What we already know:

- Using our senses to explore the world around us.
- Seasons and the changes of the weather.

Culture Capital

- Children understand why things are made of the material that they are.
- To know how to conduct simple tests to see how things work. Jobs this could be useful for: engineering.

Subject Specific Vocabulary

Material	We will be focusing on wood, plastic, glass, metal, water and rock.
Sorting	Put into groups based on similarities and/or differences.
Properties	The things that make an object what it is. Eg, glass is shiny, transparent, hard.
Testing	Revealing what something can do by putting under strain or challenge. Eg, seeing if paper will get wet and soggy or not in water.

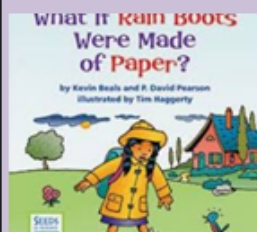
Forever Facts

I know that clothing made of plastic would be better to wear in the rain as it is waterproof.

I know that not all materials can be used for the same things.

I know the names of a range of materials and what their properties are. Eg, glass is smooth and transparent.

Exciting books



Skills

- I can look at an object and identify what materials it is made from. Eg, a window is usually a wooden frame and a glass pane to look through.
- I can explain what materials would be good for certain things based on their properties.