



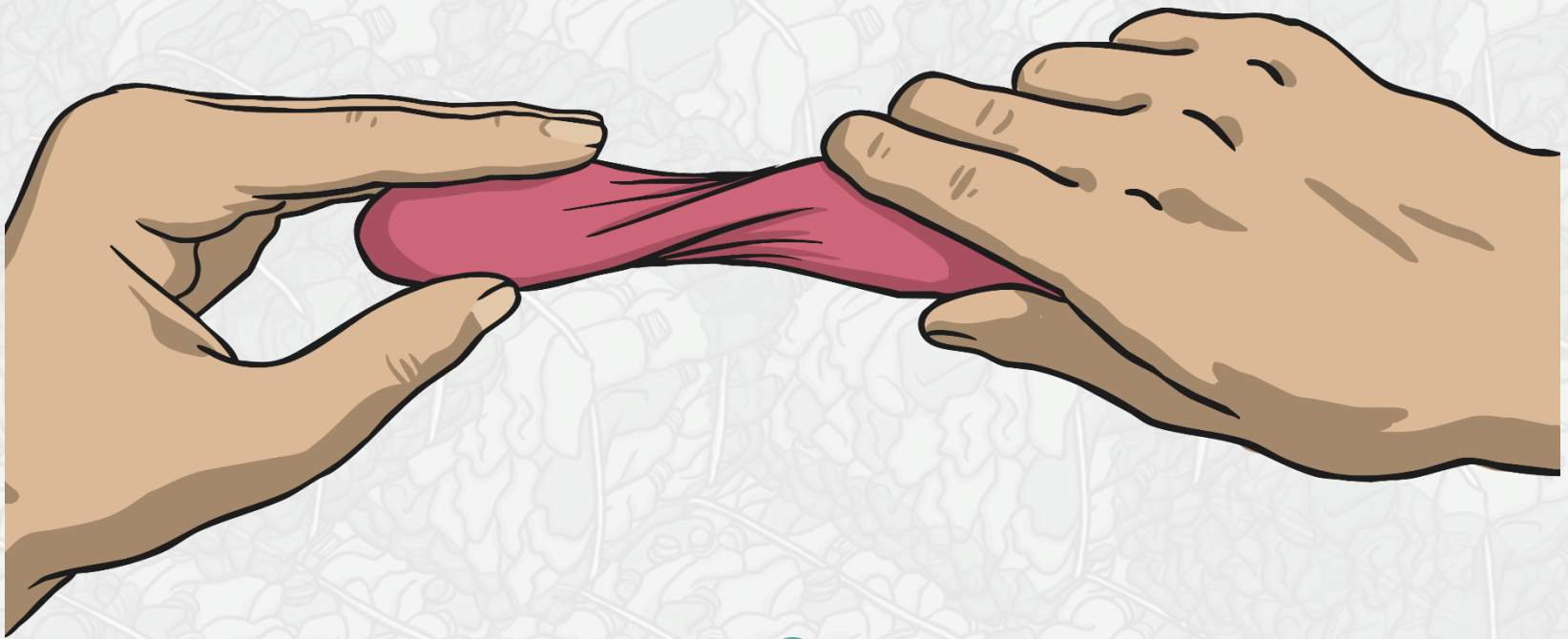
Science

Uses of Everyday Materials

Let's warm up our brains. Think about these questions:

- Why are windows made out of glass?
- Why are tools (hammers/screwdrivers/drills/saws) made from metal?
- Why don't we make cutlery out of glass?

Changing Shape



Aim

- I can explain how the shapes of objects made from some materials can be changed.

Success Criteria

- I can tell you four ways the shapes of some objects can be changed.
- I can demonstrate four ways to change the shape of some objects.

Changing the Shape of Materials

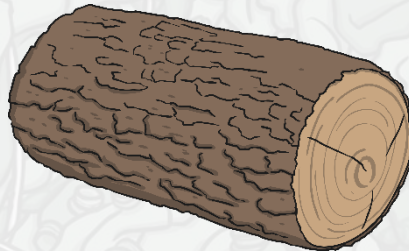
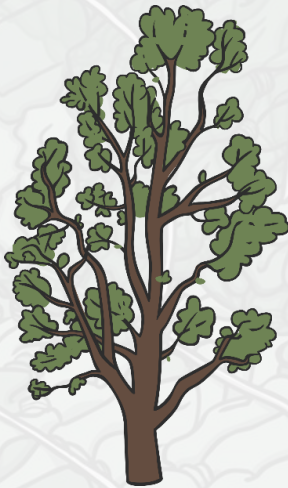


How can we change the shape of objects made from some materials?

Can you think of an example of when you have changed the shape of something? What was it and how did you change it?

Which materials do you think would be easy to change the shape of? Why?

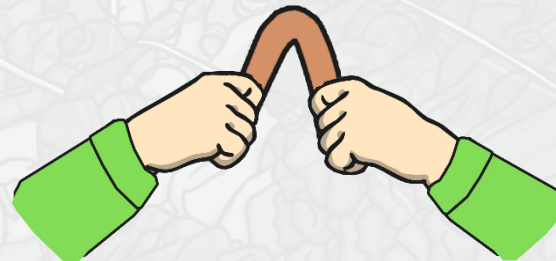
Which materials do you think would be more difficult to change the shape of and why?



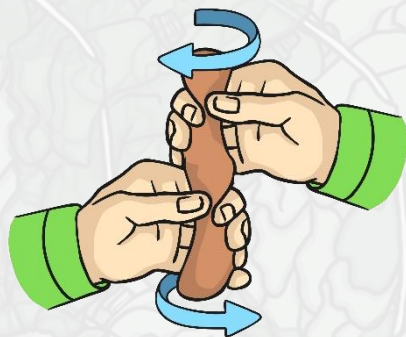
Squashing, Bending, Twisting and Stretching



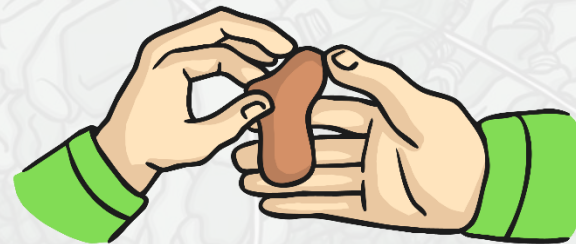
Squash an object by pushing both hands together.



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.

YOU WILL NEED:

- Pencil
- Clingfilm
- Tea towel
- Sponge
- Elastic band/hair band
- Spoon (only if you don't mind it possibly being bent!)
- Empty drinks can
- Or other safe objects from around the house made from different materials. **No glass. Check with a grown up.**

Task 1: draw

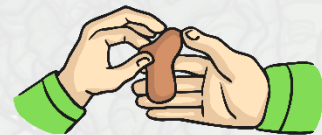
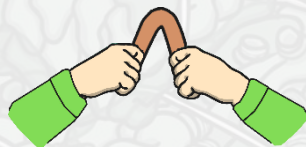
Material	Stretch	Bend	Twist	Squash
Pencil				
Tea towel				
Clingfilm				

- **Task 2:** Fill the table with your items and then test
- Does it **Stretch? Bend? Twist? Squash?**
- Fill in the table with a tick or a cross to show how that item can change

Question: What happens to these objects after you have manipulated them? Do they stay in their new form? Or go back to how they were before?



Task 3: Write a couple of sentences about what you have found out. Are you surprised by any of your results? Which materials changed shape and stayed that way and which ones could go back to how they started?



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