

Changing the Shape of Materials

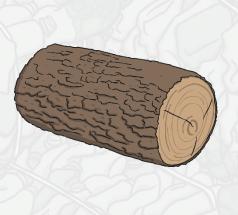
How can we change the shape of objects made from some materials?

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?







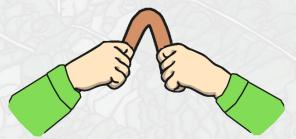
Squashing, Bending, Twisting and Stretching



You can squash an object by pushing both hands together.



You can twist an object by turning your hands in opposite directions.



You can bend an object by grabbing both ends of the object and bringing the ends inwards together.



You can stretch an object by pulling your hands slowly and gently apart.

Investigation Instructions

- 1. Gather some objects made of different materials such as a drinks can, straw, play dough, tea towel, pen, elastic band, sponge, sock.
- 2. **Before** you touch any of them, predict how you could change the shape of each of them by squashing, bending, twisting and stretching.
- 3. Explore changing the shape of the objects by gently squashing, bending, twisting or stretching them.
- 4. What happens to these objects after you have manipulated them?
- 5. Record what you find out on the worksheet that is on the timetable or draw your own table to record your results.











Now you have investigated changing some materials.

Have a think about these questions:



Can you twist a ruler?



Can you squash a ruler?



Can you stretch a pencil?



Can you bend a pencil?