

Topic - Changing Materials

Find a range of different objects that are made from different materials.



Now sort each of the materials according to what you can do with them.

Materials that I can squash.

Materials that I can stretch

Materials that I can twist

Materials that I can bend

Which materials can you not change? Can you explain why this might be?

What happens when you let go of each of the materials?

Which of the materials can be placed in more than one of the areas?

Changing bread (adult support needed)

What happens when you make toast?

Think about

smell

look

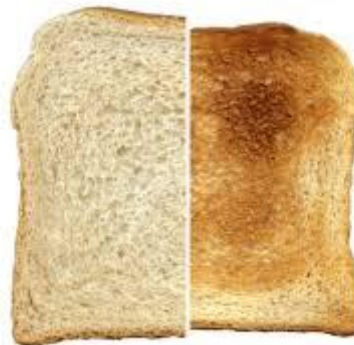
listen

feel

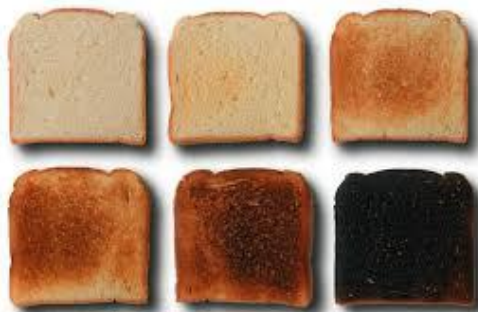
taste

Now investigate how to make the perfect piece of toast. This will vary according to your own tastes.

Using either a timer or the numbered button on a toaster to cook the toast for different lengths of time. Toast a piece of bread for 30 seconds, toast another for one minute, another for 1 minute thirty seconds and so on. Taste each piece of toast. Again think about all of the headings above.



(If you do this with your family you could each taste each piece and decide which piece is your favourite and why - in my family two of my children like it nearly black, but I prefer it just slightly golden!)



How long did it take to make the perfect piece of toast for you?

Melting Chocolate - Adult support needed science/maths (time)

- Which melts more quickly: big pieces of chocolate or small pieces of chocolate such as chocolate buttons?

Write down your prediction and try to explain why you think this. (*I think the _____ will melt fastest because ...*)

You will need

a bar of chocolate broken into three pieces, one of them large, one medium sized and one small

some chocolate buttons

A glass bowl placed over hot water in a pan

A timer or stopwatch (on a phone for example)



First watch an adult heat the water in the pan then put three chocolate buttons and the three pieces of chocolate into the bowl. Watch as they begin to melt.

Using the timer find out how long it takes for each of the pieces to completely melt. You may need to stir the mixture as you watch.

Complete the following table

| Size of pieces | Time taken to melt completely |
|---------------------|-------------------------------|
| Large piece | |
| Medium piece | |
| Small piece | |
| 3 chocolate buttons | |

Why do you think this happens?

What does this mean for cooks when they want to prepare foods quickly?