



Curious Heat Conduction

Equipment you will need:

- Mug/ heat-proof container
- Plastic spoon
- Metal spoon
- Wooden spoon
- 3 sequins
- Butter
- Boiling water
- Knife

Method:

1. First, carefully position the three spoons in the heat proof container.
2. Place a small piece of butter at the top of each spoon. Try to ensure that you use the same amount of butter on each spoon. Remember to place the butter in the same area of each spoon too.
3. Gently place one sequin on each piece of butter.
4. Using great care, pour the boiling water into the container until it is about 2cm from the top. Ensure that the spoons do not move as the water is poured in.
5. Now it is time to observe. You may need to wait a few minutes before noticing any changes.

Hints and Tips

Conduction is the way in which heat moves through solid objects.

Today, we investigated heat conduction using three different types of materials (plastic, metal and wood). When objects are placed into boiling water, the heat from the water will transfer into these objects. We have found that the butter will melt first on the object which is a good heat conductor.

Take a moment to reflect.

Which object was the best conductor of heat?

Which object would be best to use for cooking? Why?