

Science

Thursday 28th January 2021

WALT: Observe a change in state

S2S: I can

- Plan a fair test
- Identify when a change is happening
- Measure temperature
- Discuss findings

Key Learning

- **Melting** is a **change of state** from solid to liquid. **Freezing** is a **change of state** from liquid to solid.
- The temperature a liquid freezes at is called its **freezing point**. The **freezing point** of water is 0°C .
- Different substances have different freezing points.

Talk or think about these questions:

- *Can you name some substances that melt easily?*
- *What does 'melting point' mean?*



[What are freezing and melting?](#)

Melting is a **change of state**. A solid material is *heated* and becomes a liquid.

- Ice melts at zero degrees Celsius (0°C). This is the **melting point**.
- Chocolate melts at about 30°C .
- Iron melts at about 1500°C !



Freezing is also a **change of state**. A liquid is *cooled down* and changes to a solid.



solid

melting



freezing



liquid

Investigation: Do different types of chocolate melt in the same way?

- For this experiment you will need 1 piece of three different types of chocolate, I suggest milk, white and dark. You will also need a bowl, some hot water (make sure an adult is with you), stopwatch and a thermometer (if you have one!)
- Make your prediction – which type of chocolate do you think will melt the quickest? Why?
- Choose the piece of chocolate that you are going to start with.
- Carefully place it into bowl so that it floats on the surface of the hot water and start your timer.
- Time how long it takes for the chocolate to start melting.
- Once you can see a change of state happening, record the temperature of the water (if you don't have a thermometer don't worry about this).
- Complete for the 2 remaining pieces.
- Top tip: when you move on to the next piece of chocolate, change the water but make sure that you are starting with the same amount and at the same temperature.
- Record your results.
- What did you find out? You can send your teacher a written message or a video message through dojo to tell them!