



Chocolate Melting STEM Activity



Changes of Matter

We can change a state of matter by heating it or cooling it.

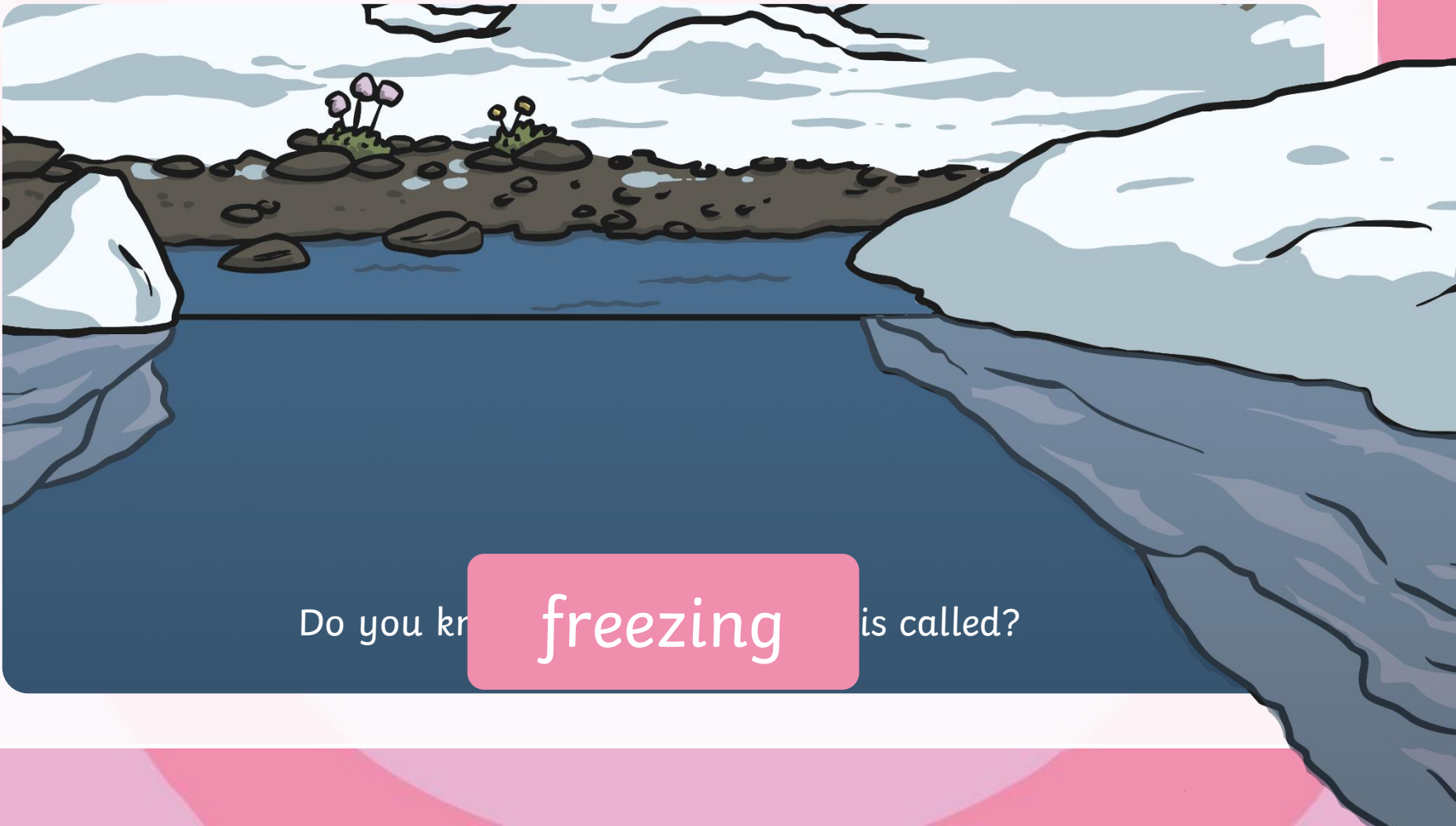
For example, if we heat ice, we can change it from a **solid** to a **liquid**.



Do you know what **melting** is called?

Changes of Matter

If we make water really cold, it changes from a **liquid** to a **solid**.



Do you know

freezing

is called?

Your Task

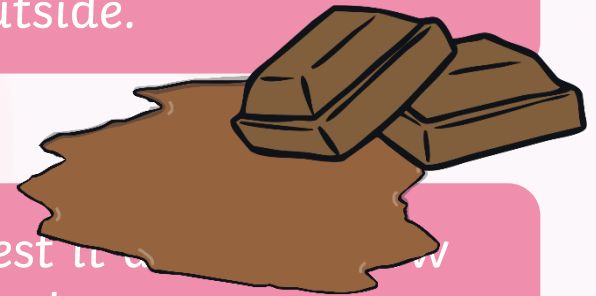
Using the materials provided, create a device that will help us melt chocolate, when put outside.

You are going to create it, then we will test it to see how long it takes to melt the chocolate.

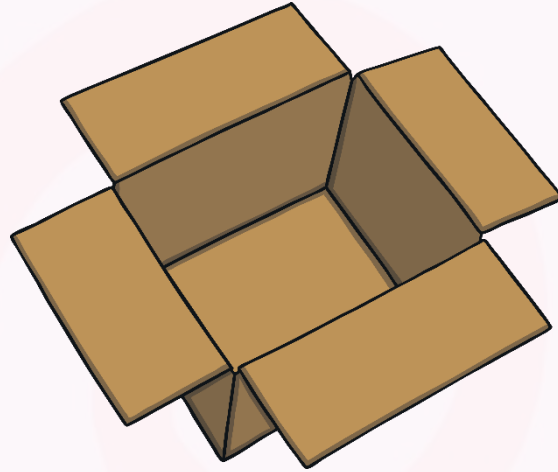
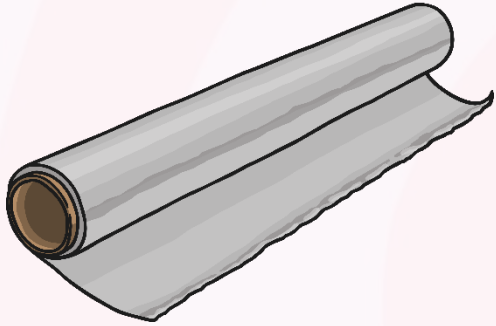
You will then have the chance to change it if you need to before we start again.



10



You Will Need



- Cardboard boxes
- Aluminium foil
- Tissue paper
- Milk bottle lids
- Timers

- White chocolate drops
- Milk chocolate drops
- Dark milk chocolate drops
- Cardboard tubes

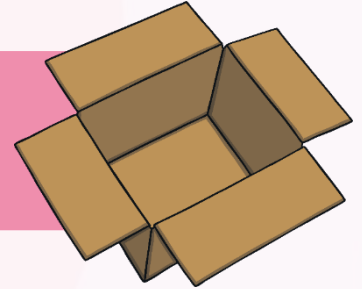
Your Device

Think about the materials you have and how you will put your device together to ensure the chocolate melts.

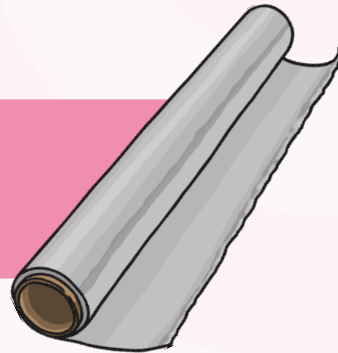
What could the milk bottle lids be used for?



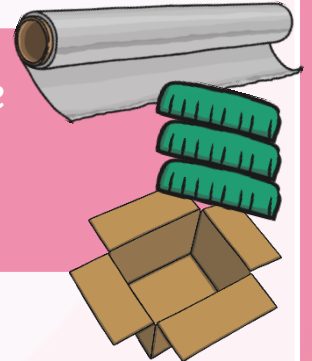
Will your box be open or closed?



How could you use the tissue paper and foil?



Will you use all the materials or just some of them?



Fair Test

This will be a fair test, which means you can only change one thing at a time.



For example, if you change your design, you have to place the device back in the exact same place.

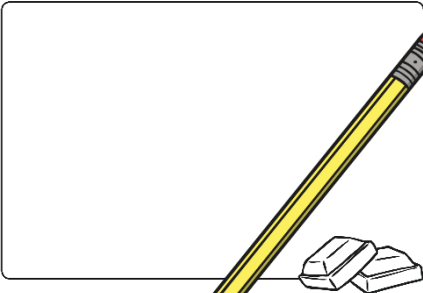
If you decide you want to test it in a new area, you cannot change the device.

Create

Alter your device and test again.

Chocolate Melting Investigation

Draw and label your device.





I think my chocolate drop will melt in _____ minutes and _____ seconds.

Results from 1st Test
My chocolate drop melted in 2 minutes and 1 seconds.

Make your change. Remember to only make one change so that it is a fair test.

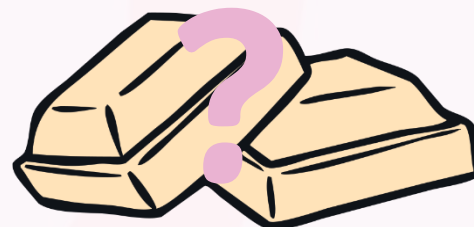
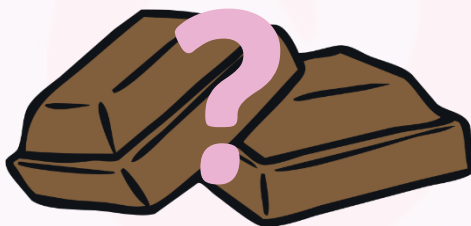
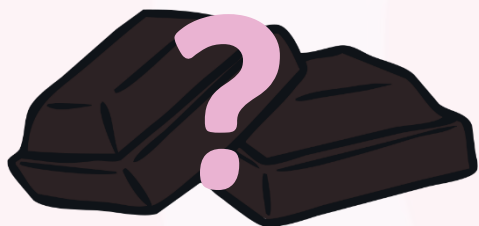
The change I made was _____
because _____.

Results after Change
My chocolate drop melted in _____ minutes and _____ seconds.

Go Further

Which melts faster – dark chocolate, milk chocolate or white chocolate?

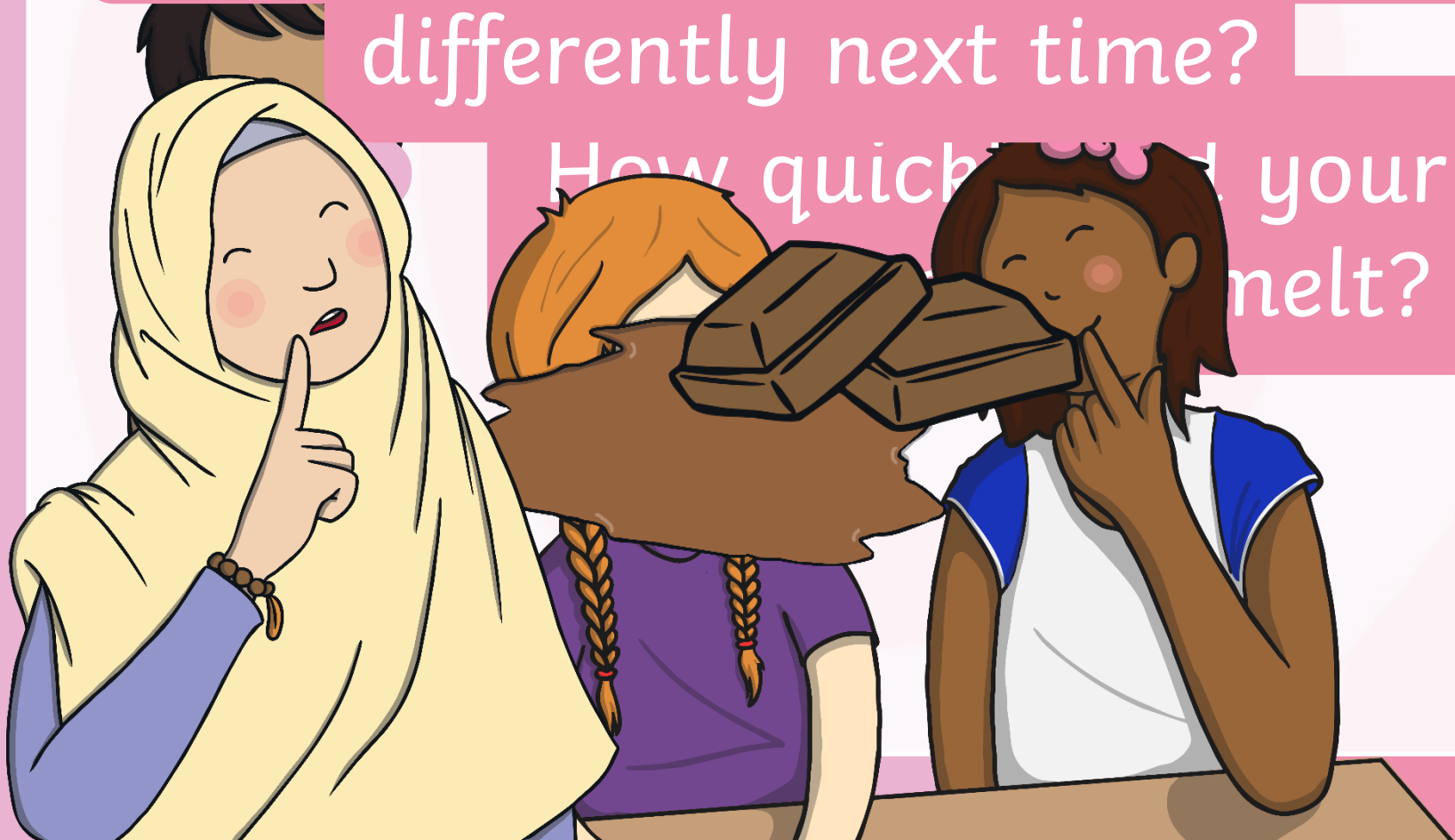


Design a fair test to explore which chocolate will melt the quickest, using your device.

Reflection

Who? What could you do differently next time?

How quickly did your melt?





twinkl

