

## @ HOME SCIENCE DISCOVERY MISSIONS – Chocolate melting



### Protocol

#### What Do We Need?

1. Small chocolate pieces of the same size (chocolate bar squares or chocolate chips are a good idea)
2. Paper plates
3. Pen and paper to record your results



1. Put one piece of chocolate on a paper plate and put it outside in the shade.
2. Record how long it took for the chocolate to melt or if it wasn't hot enough to melt then record how soft it was after 10 minutes.
3. Repeat the process with a piece of chocolate on a plate that you put outside in the sun.
4. Record your results in the same way.
5. Find more interesting locations to test how long it takes for the chocolate pieces to melt. You could try your school bag, hot water or even your own mouth. Try melting frozen pieces of chocolate for comparison. Try different types of chocolate as well.
6. Compare your results, in what conditions did the chocolate melt? You might also like to record the temperatures of the locations you used using a thermometer so you can think about what temperature chocolate melts at.



#### YOUR MISSION REPORT

At a certain temperature our chocolate pieces undergo a physical change, from a solid to a liquid ( or somewhere in between). On a hot day, sunlight is usually enough to melt chocolate, something we might have already experienced. We can also reverse the process by putting the melted chocolate into a fridge or freezer where it will go from a liquid back to solid



**Did you know?**  
The melting point of chocolate falls between 86°F and 90°F (around 30°C)

Learn more!

Video here:

[https://www.youtube.com/watch?v=BYy0a8q3Lv&fbclid=IwAR3C4aE94BNz\\_I2v3Lb9KB1ZQqVh2mD8K9cXy1AjvRFYx-0hRTtXMHV6NUY](https://www.youtube.com/watch?v=BYy0a8q3Lv&fbclid=IwAR3C4aE94BNz_I2v3Lb9KB1ZQqVh2mD8K9cXy1AjvRFYx-0hRTtXMHV6NUY)

Country Lithuania Grade 10th

Student feedback - How did you like this mission?



☐ not at all



☐ not much



☐ a bit



☐ liked it



☒ liked it a lot



☐ liked it best

Family feedback - How did you like this mission?



☐ not at all



☐ not much



☐ a bit



☐ liked it



☒ liked it a lot



☐ liked it best

Did you use the 'Learn more!' resources?

☒ Yes

☐ No

What was good/bad about this mission? The mission was not only educational but also delicious 😊