



# How to make a box of chocolates

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LO: TO OBSERVE REVERSIBLE CHANGES IN STATE.

# Reversible changes



In previous weeks, we have looked at different states of matter: solid, liquid and gases. We have also looked at the properties of some materials categorized under solids.



We also looked at changes in state. For example, solid ice cubes melting when heated and becoming liquid water. When the liquid water was cooled, it froze back into solid ice again. This is a reversible change.

Today, we are going to look a different reversible change in state.

# What experiment could you design using the objects below to show changes in state for chocolate?



First, I could...

Next,...

Second, I could,

After that, ...

Then, ...

Finally, ...



# Instructions

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1. First, break the bar of cooking chocolate into little pieces. Place them into a Pyrex bowl.
2. Next, pour water into a pan and boil on the stove.
3. Once the water has boiled, your adult needs to carefully place the Pyrex bowl on top a pan.
4. After that, continue to heat on the hob and slowly mix the chocolate with a wooden spoon as it melts.
5. Once the chocolate has completely melted into a liquid, turn the hob off.
6. Using a spoon, scoop some of the melted liquid chocolate and carefully pour it into each part of an ice cube tray. (This works best with silicone pop-out ice cube trays). You can use mini cake cases too.
7. Then, place the ice cube tray in the fridge until the liquid melted chocolate turns back into solid chocolate.
8. Finally, eat it. Yum!

# Instructional video

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<https://www.youtube.com/watch?v=S20OLMrEmz8>



# Experiment time - with an adult

Send us photos or short videos of your experiment.

We look forward to seeing them!

Observe how the chocolate changes from a solid bar, to liquid when melted/heated, then reverses back to a solid once cooled.

Maybe you can design your own kinds of delicious chocolates. White chocolate and strawberries / dark chocolate and nuts.



White chocolate and strawberries



Dark chocolate and nut

