

@ HOME SCIENCE DISCOVERY MISSIONS – HOMEMADE THERMOMETER

What Do We Need?

- Mason jar with a straw lid
- Clear straw
- Playdough or modelling clay
- Water
- Rubbing alcohol
- Cooking oil (any kind)
- Red food coloring

Protocol

1. Add red food coloring, 1/4 cup water, 1/4 cup alcohol and a tablespoon of oil into a mason jar and mix.
2. Stick the straw through the straw hole and tighten the lid onto the jar.
3. Mould a piece of playdough on the lid around the straw, which will hold the straw about 1/2" from the bottom of the jar.
4. Place your DIY thermometer outside in the cold or in the fridge and inside the house and look at the difference in how high the liquid rises in the straw in different temperatures.

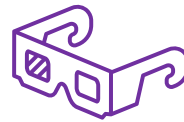
YOUR MISSION REPORT

- Measure the temperature in different rooms – was it different?

- Where do you see science in this mission?

-How does a homemade thermometer work?

-How can you make a homemade thermometer without alcohol?



Did you know?

That the hottest temperature ever recorded on earth is 57.8 °C (136 °F) in Libya.

Learn more!

Video here:

<https://www.youtube.com/watch?v=1LOk1XzbPvg>



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?