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Boil Water in a Paper Cup

Ingredients

- Water
- Paper Cup
- Butane Lighter
- Thermometer

Science Terms

- **Water** – A colorless, usually liquid, material made of hydrogen and oxygen.
- **Heat** – To add heat energy to a substance.
- **Heat Energy** – The energy a substance has because of the movement of the particles that it is made of.

Instructions

STEP 1: Submerge the paper cup in water. Remove the paper cup from the water and fill it half of the way with water. Place the thermometer in the cup of water to determine the temperature.

STEP 2: Using the butane lighter create a flame. Carefully hold the flame under the cup of water for a few minutes. Make sure the flame is directly under the cup of water.

STEP 3: Remove the flame from the cup and place the thermometer in the cup of water to determine the temperature.

Explanation

The heat from the flame is transferred directly to the water. You will observe a significant temperature increase after you place the flame under the cup. If the flame is left under the cup of water long enough the water will start to boil.



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