

ACTIVITY
Heat Energy - Convection

Name: _____

Date: _____

Part 1

1. Write the question you are investigating.

How does heat energy transfer differently with hot and cold water?

2. Write what you think will happen.

3. List the materials you will use.

1. Large Jars
2. Small jars
3. Red/ food coloring
Blue
4. Foil
5. Rubberbands

4. Write the steps you took.

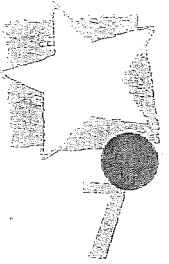
Jar 1

1. Fill Jar with room temp. water
2. Place red-dyed hot water vial in large jar (cov. with foil)

Jar 2

1. Fill jar with room temp. water
2. Place blue dyed ice-water vial in large jar (cov. with foil)

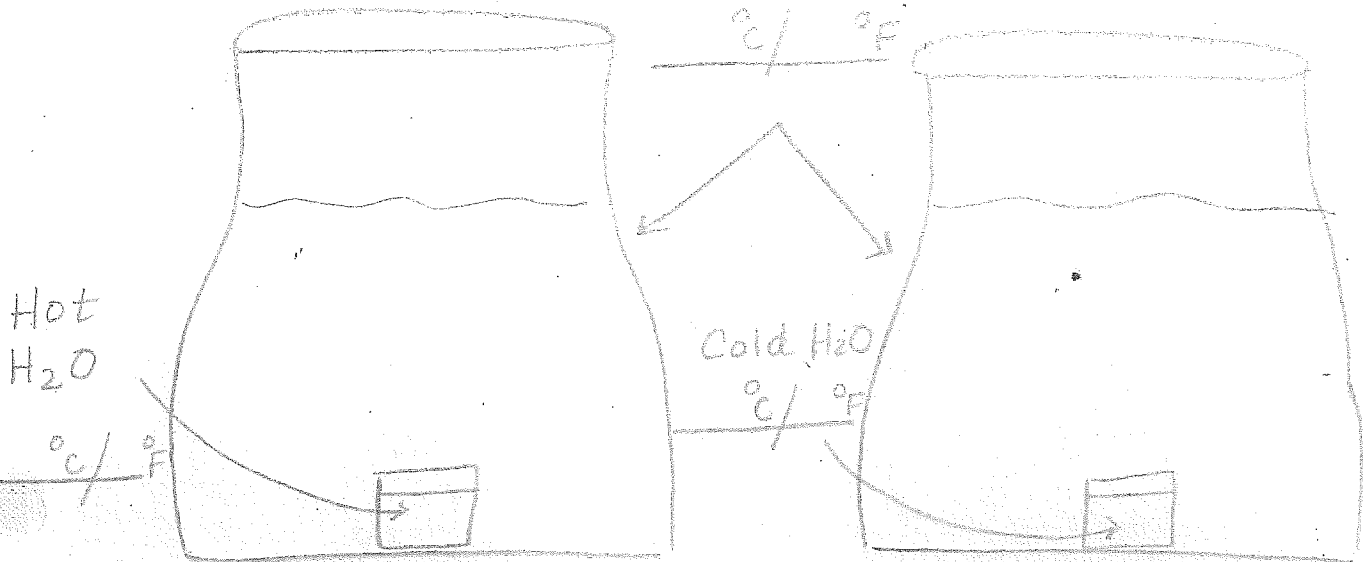
Name: _____



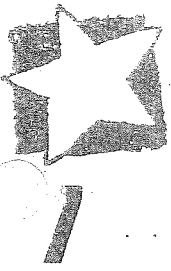
Date: _____

5. Record your data and observations.

Room Temp. H₂O



6. Write a scientific statement or conclusion for your investigation. Include a clear and concise claim, supported by evidence and scientific reasoning.



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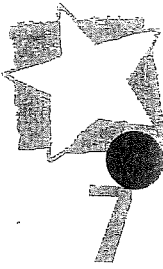
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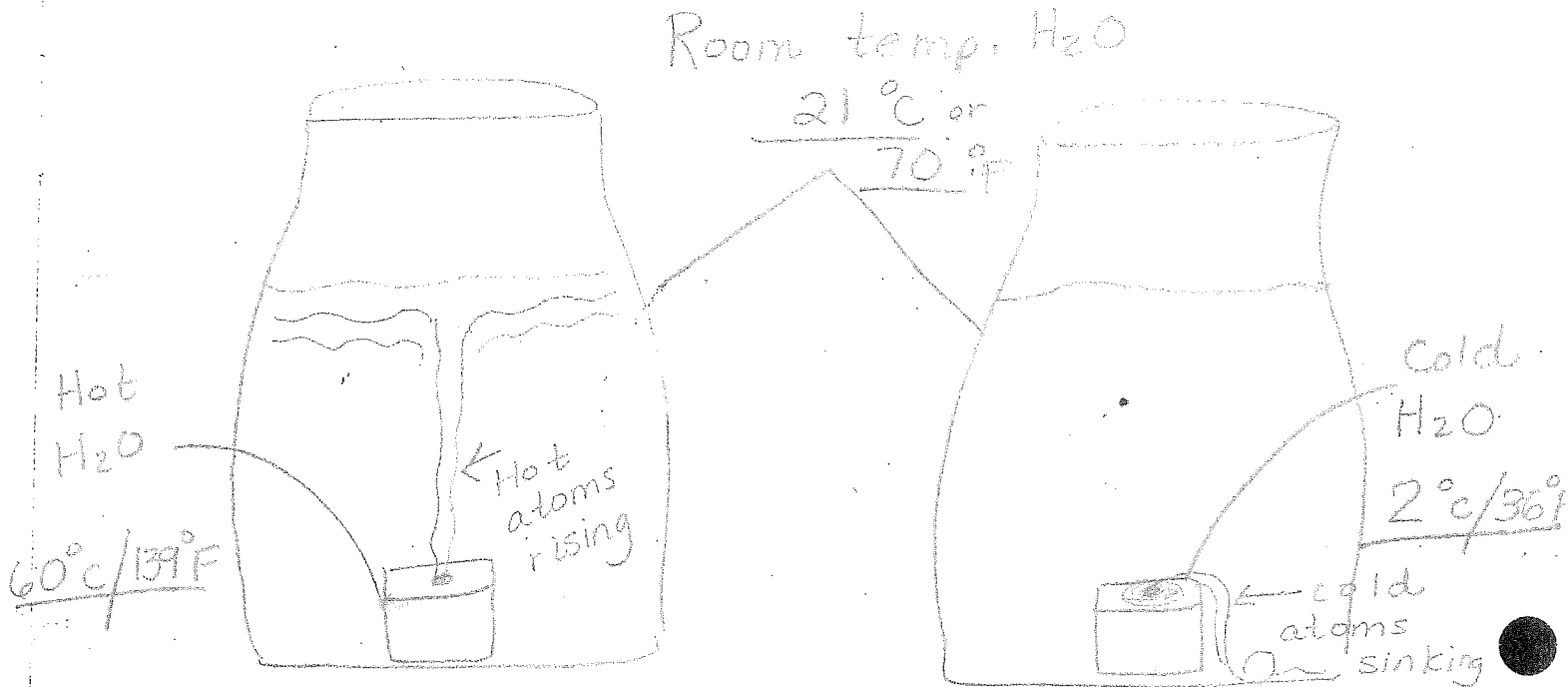
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CL

Hot fluid rose up and cold fluid did not rise up.

EV

The data from our observations (visual) showed the hot (60°C/140°F) rose up & ~~the~~ cold (2°C/36°F) did not rise.

R

The reason the hot fluid rose is the atoms have more kinetic/heat energy, so they rise & expand. The cold fluid ~~has~~ has less kinetic energy, so the atoms sink & contract (get closer).

This is called CONVECTION.