



WATER WATER EVERYWHERE

Name: _____ Date: _____

TEMPERATURE

THINK FIRST!

What happens if you dump a pan of blue-colored water into a pan of red-colored water? They will mix, of course, and make purple-colored water. Now let's say the blue water is cold and the red water hot. What do you think will happen if, instead of dumping the two together, you gently and slowly pour them together?

How could temperature help cause ocean currents?

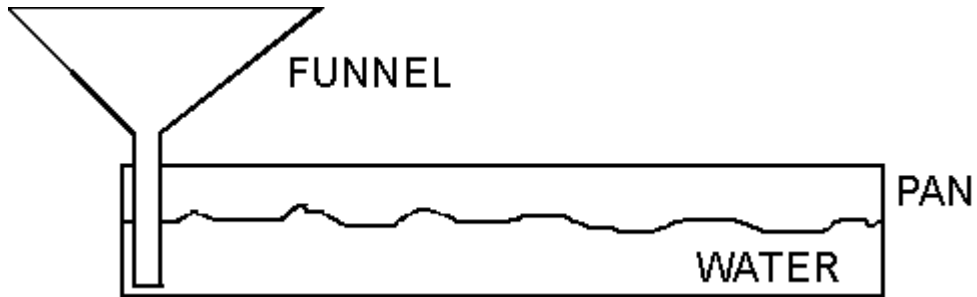
MATERIALS

- 1 flat pan
- 1 funnel
- 1 plastic spoon

- 2 ice cubes
- food color
- cold water
- measuring cups
- hot tap water

PROCEDURE

1. Fill the pan half way with hot tap water. Let the water settle down and be careful from here on not to bump the pan or the desk.
2. Put 1/3 cup of cold water, 6 drops of food color, and the ice cubes in the largest cup. Stir for a few minutes so the water gets very cold.
3. Put the funnel in one corner of the pan so that the tip of the funnel touches the bottom of the pan.



4. Slowly drip the cold water into the funnel. What happens?

How could temperature help cause ocean currents?

5. After the water has reached steady state (nothing appears to be changing), describe the contents of the pan using words and/or a sketch.

CONCLUSION

How could temperature help cause ocean currents?

QUESTIONS

How could you assure yourself that the effect you observed in this experiment was due to the difference in water temperature?

How could temperature help cause ocean currents?
