Name:	Date:

# Sea for Yourself

#### **Introduction**

An ocean current is a large amount of water flowing in the same direction over time and over a long distance. This investigation is going to use a model to think more about ocean currents.

#### **Materials**

- Yellow, green, blue and red food coloring
- Room temperature water
- Ice-cold water
- Hot water
- Insulating gloves
- Turkey baster (not necessary but advised)
- 1 clear rectangular container (approximately the size of a shoe box)
- Book(s) or block of wood (to prop up container)
- 2 measuring cups (or beakers)
- 1 teaspoon



### Safety: HOT liquid

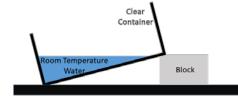
Use insulating gloves to handle the hot water and the beaker or cup it is in.

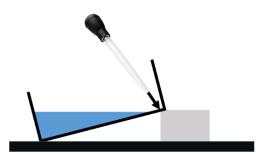
#### **Procedure**

- 1. Prepare the tank
  - Prop the container on the book or block of wood.
  - Fill the container with room temperature water until the water sits level with top of the book or wooden block.

#### 2. Make a cold water current

- Fill a cup with ice-cold water (approx. 225 ml).
- Add 3 drops of blue food coloring and mix.
- SLOWLY add the cold water to the high side of the container. If you have a turkey baster use this to add the water. Otherwise pour SLOWLY from the cup.





#### 3. Make a warm water current

- Fill a cup with hot water (approx. 225 ml).
- Add 3 drops of red food coloring and mix.
- SLOWLY add the hot water to the high side of the container, using the turkey baster or pouring from the cup.





## **Observations**

What did you observe? You may write your answer or draw a labeled diagram.

<u>Explain</u>
This happened because



