**Material:**

1 clear rectangle container

1 cup

1 pipet or dropper

Food Coloring (only a few drops)

1 Drinking Straw

**Instructions:**

1. Fill a clear container ¾ full of warm water.

2. Fill a cup with cold water and add a couple drops of blue food coloring.

3. Fill the pipet with the cold blue water and add to one side of the container

4. Stand at the opposite end of the cold blue water. Clear water should be close to you and cold blue water should be away.

5. Place the straw at about 1”- 2” above the water at a 25o angle. You will now simulate wind by blowing across the surface of the water (towards the cold blue water).

**Science Question:** What causes ocean upwellings?

**Hypothesis** (1pt)**:** I think \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Observations** (1pt)**:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Questions**

1. What does the cold blue water represent; deep ocean water or surface water? Deep Ocean W

2. By blowing on the water, you are generating what kind of current; surface, deep ocean, or both (1pt)? Explain (1pt)?

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3. This lab demonstrates what? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Using the Figure on page 521 in your book, list two possible cold currents that are caused by upwelling (2pt).

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Using the Figure on page 520, which global wind pattern is the probable cause for these upwellings? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Conclusion** (1pt)**:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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