**Mystery Solution Lab**

You are trying to layer the 4 varieties of colored water.

Try the combinations listed below. The Top color should float on the bottom color.

Place an “X” over all that are not possible

Circle all that are possible.

Blue Green Blue Red

Green Blue Red Blue

Blue Yellow Green Red

Yellow Blue Red Green

Green Yellow Red Yellow

Yellow Green Yellow Red

List the four solutions from lightest to heaviest:

\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_

Lightest Heaviest

surface currents cold waters of

by Equator Antarctica

Can you put all 4 solutions in a test tube in clear layers?

(Which needs to be in the bottom?)

Show your teacher when you have accomplished this.

Can you put all 4 solutions in a straw in clear layers?

Show your teacher when you have accomplished this.

Questions.

1. What is the difference between surface currents and deep currents?

2. Which is more dense, cold or hot water? Explain

3. What is the rising of deep cold currents to the ocean surface called?

4. What happens to the salt water as you add fresh water?

5. List some ways that water can increase in density?

6. How are deep ocean currents important to sea life?