# LABORATORY REPORT SHEET MBAS

| NAME: | DATE: |  |
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# Lab Report Title: Properties of Water and Other Liquids

#### **Activity**:

Directions:

- 1. Read pages 154 155 in the Fluid Earth
- 2. Go to Each Station and follow the directions at that station.
- 3. Record observations and data
- 4. Answer, on loose-leaf, the questions listed below.

## Questions (Give page #) and/or Data:

#### Station #1

- 1. What happened to the die in the hot water? Cold water?
- 2. How are temperature differences you've noticed in the oceans like those you've observed in this experiment?
- 3. How does water form thermal density layers?
- 4. How do these layers affect visibility?
- 5. How do these layers look to a snorkeler?
- 6. Why might warm water sometimes be found below colder water?

#### Station #2

- 1. Which liquid will the container hold more of before it spills, water or alcohol?
- 2. What would happen in this experiment if water and alcohol were mixed?
- 3. How might you explain your observations?

#### Station #3

- 1. Is aluminum foil more or less heavy than an equal amount of water? Of alcohol?
- 2. If it is heaver, what keeps it afloat?

### Station #4

1. Which liquid had the most salt dissolve in it? Why?

#### Station #5

- 1. Which liquid formed the roundest drops? The flattest drops?
- 2. Did all the drops maintain their shape?
- 3. What happened as the drops rolled own the inclined surface?
- 4. What other properties did you observe?

#### Station #6

- 1. When a fully loaded ship travels from open ocean through a canal into a freshwater river or lake, how does the way it floats change?
- 2. How would a non-athlete's body float in water compared to the body of a weight lifter? Who would float better? Why?

## **Conclusion**

- 1. How do the properties of fresh water compare with the properties of salt water? Of alcohol?
- 2. Which of your observations can you not explain? Be specific