The North Atlantic Current Investigation Activity Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Handout 2

1. Describe the contents of each jar:
2. Immediately after the removal of the notecard, trace the flow of water from 0-6 minutes. Describe observations for below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Time (min) | Red Top/Blue Bottom | Blue Top/Red Bottom | Green Top/Yellow Bottom | Yellow Top/Green Bottom |
| 0-2 |  |  |  |  |
| 2-4 |  |  |  |  |
| 4-6 |  |  |  |  |

Answer the following questions:

1. What is density?
2. In water, high density objectives are more likely to sink/float and low density are more likely to sink/float.
3. Based upon your observations, the cool water is (more/less) dense than the warm water.

Why do you think this is?

1. Based upon your observation, the freshwater is (more/less) dense than the salt water.

Why do you think this is?

1. Now image that we were to do the jar activity again- but this time, we will use one jar containing cold, salty water (blue) and another jar containing warm, fresh water (red). What do you predict would happen?
2. Based upon the diagram below and what you know about density, label where you would find warm water (red), cool water (blue), freshwater (yellow), and saltwater (green) in the ocean.