Name:   Date: Class:

**Coke vs. Diet Coke**

**Problem / Question:**

What will happen when a Coke and Diet Coke are dropped in the Super Tank of Science?

**Research:**Using your senses of touch, smell, and sight, make observations about the Coke and Diet Coke. Record these observations below. Also use your prior knowledge about things sinking and floating and answer the questions below.

|  |  |  |
| --- | --- | --- |
| **Soda** | **Qualitative Observations** | **Quantitative Observations** |
| Coke |  |  |
| **Diet Coke** |  |  |

**Hypothesis:**

If the teacher places the coke and diet coke in the Super Tank of Science (aquarium) then the Diet coke will \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and the Coke

will \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Experiment:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Soda** | **Sink or Float** | **Mass**  **(grams)**  **Triple Beam Balance** | **Volume**  **(milliliters)** | **Density**  **(g/mL)**  **Mass divided by Volume** |
| Coke |  |  |  |  |
| Diet Coke |  |  |  |  |

**Analysis:**

1. Using data explain what happened when the Coke was placed in the fresh water.
2. Using data explain what happened when the Diet Coke was placed in the fresh water.

**Conclusion:**

Answer the lab question: What will happen when a Coke and Diet Coke are dropped in the Super Tank of Science? Be sure to include data about the density of each drink and the density of fresh water. You should tell the density of the Coke and Diet Coke and what you observed when they were placed in the Super Tank.