Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Homeroom: \_\_\_\_\_\_\_\_ Date : \_\_\_\_\_\_\_\_ **3.4**

**Density: Part II (SPI.9.7)**

|  |
| --- |
| **Density Demo (Coke and Diet Coke)** |
| 1. What is density?2. In order for an object to float in water, the object needs to be (more dense/ less dense) **CIRCLE ONE** in comparison to the water.3. Make a *hypothesis* if coke and diet coke will float or sink in water.4. What *scientific evidence* do you have from this demonstration do you have to *argue and defend* that density is not just a measure of how “heavy” an object is?  |

|  |  |
| --- | --- |
| ***Key Point*** | ***Notes*** |
| **The GUESS Method** | **G:****U:****E:****S:****S:**Guided Example: |
| **Comparing Objects Based on Density** | * 1. Calculate the density of \_\_\_\_\_\_ object.
* 2. If the question asks you to order the objects:
	1. If you are asked to place objects in order of *increasing* density, start with the object with the \_\_\_\_\_\_\_\_\_\_ and end with the object with the greatest
	2. If you are asked to place objects in order of \_\_\_\_\_\_\_\_\_\_\_ density, start with the object with the greatest and end with the object with the smallest
* 3. Use your knowledge, get question correct, do awesome on TCAP, and make your parents, Coach Cody, and yourself proud!
 |
| **Solving for Mass using the Density Equation** |  |
| **Solving for Volume using the Density Equation** |  |
| **So What?!** | *The effects of density are so evident in the real world around us. Why do you think learning about density is important?! Do not just put something on this paper to fill in this box-think about it! Make it meaningful to you-own it!* |

**“We Own This” (Guided Practice):** *Write down your answers from “Speed Dating” here!*

1.

2.

3.

4.

5.

6.

7.

8.

 **“I Own This” (Independent Practice):**

1. Calculate the densities for the following blocks.

Block A

Block B

2. Which one of the blocks above has the greatest density?

3. Place the blocks on the right in order from least density to greatest density. Show where you calculated the density.

Block X

Mass= 4 g

Volume= 4 mL

Block Y

Mass= 1 g

Volume= 2 mL

Block Z

Mass= 15 g

Volume= 5 mL