

Name: \_\_\_\_\_

### Planning Water Samples

*Plan your experiment, decide with a partner what water samples you will create and fill in the table below, then record your hypothesis.*

<b>Water Sample Description (circle)</b>	<b>Water Color</b>
Your Sample: Hot / Cold Fresh / Salt	
Partner's Sample: Hot / Cold Fresh / Salt	

What do you hypothesize will happen when you combine your water sample in the density tank with your partner's sample?

### Measuring Water Samples

*For Your Sample: Record the information requested in the table below.*

*For Partner's Sample: Copy the information your partner recorded and measured to fill out this table.*

*Be sure to weigh your beaker before preparing a water sample in it.*

<b>Water Sample</b>	<b>Mass of Empty Beaker (g)</b>	<b>Total Mass of Beaker and Water Sample (g)</b>	<b>Volume of Water Sample (mL)</b>
Your Sample:			
Partner's Sample:			

## Observations

Perform the experiment in the divided tank, and record your observations of the side view of the tank: write at least one sentence about what you observed.

## Calculating Water Samples

Use the data you recorded for your sample, to perform the calculations below.

1. Your Sample:

$$\frac{\text{g}}{\text{Total Mass of Beaker and Water Sample}} - \frac{\text{g}}{\text{Mass of Empty Beaker}} = \frac{\text{g}}{\text{Mass of Water Sample}}$$

$$\frac{\text{g}}{\text{Mass of Water Sample}} / \frac{\text{mL}}{\text{Volume of Water Sample}} = \frac{\text{g/mL}}{\text{Density of Water Sample}}$$

Fill in the table using your calculation of density, and your partner's.

Water Sample	Water Color	Density of Water Sample
Your Sample:		
Partner's Sample:		

Explain why you think your water samples behaved in your density tank the way they did. Use your calculations to support your argument.