



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

# PROPERTIES OF MATTER: DENSITY

Fill out the questions below as you progress through the Properties of Matter: Density lesson and slideshow.

1. Watch the video. What do you notice?

2. Fill in the chart below with the differences between matter and energy.

 <b>Matter</b>	 <b>Energy</b>

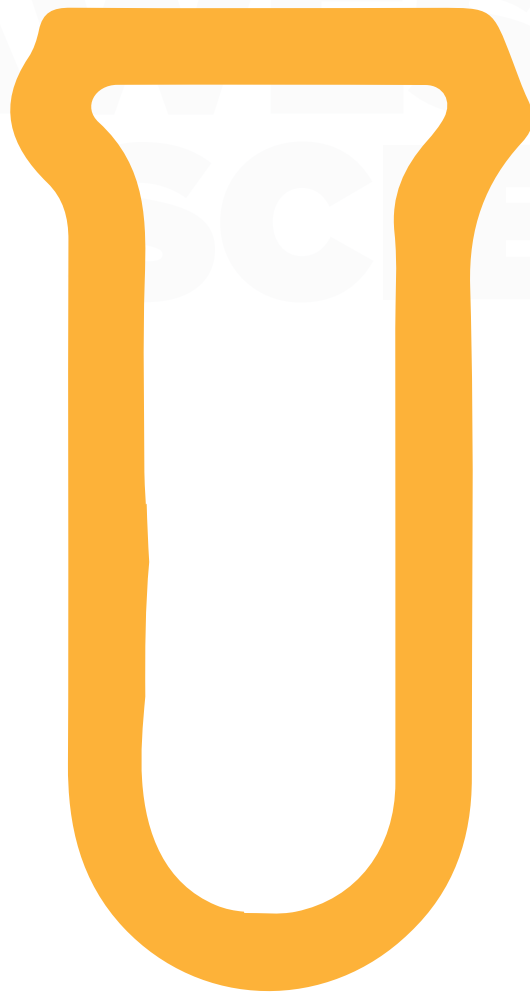
## EXPERIMENT TIME:

3. Hypothesize what will happen when you combine the six liquids.

I predict that \_\_\_\_\_

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4. Draw what your mixture looks like below.



5. Check the boxes with “sink” or “float” based on your predictions. Then check the box after you test the results.

	<i>Prediction</i>		<i>Test It!</i>	
	Sink	Float	Sink	Float
<b>Object 1</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Object 2</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Object 3</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

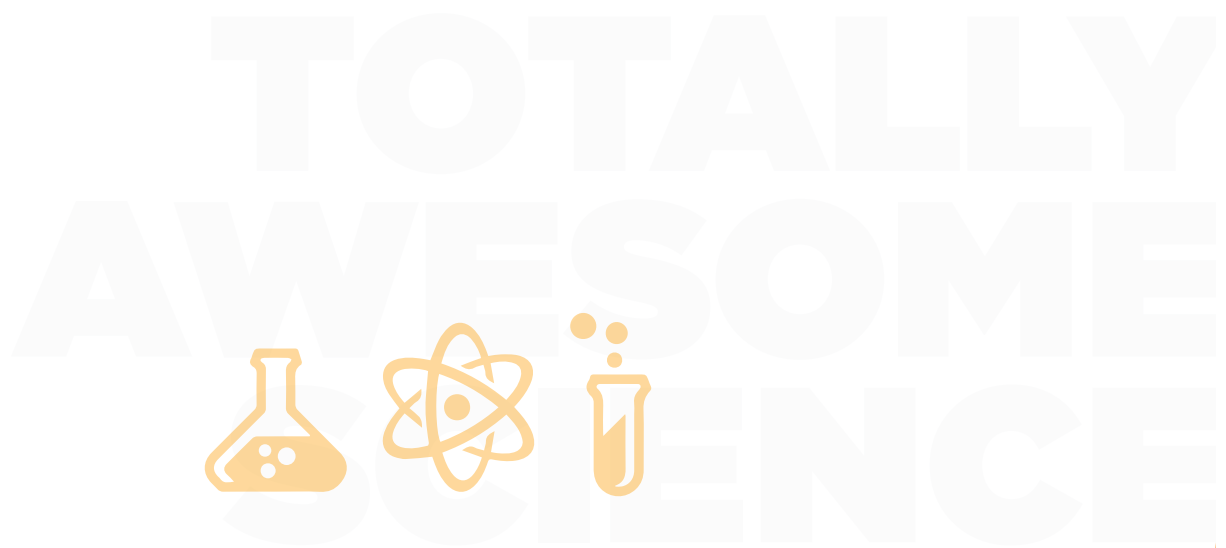
6. Once you put the object in the density tower, it will land between two liquids. Can you describe the density?

**Object 1 is more dense than \_\_\_\_\_**  
**but less dense than \_\_\_\_\_**

**Object 2 is more dense than \_\_\_\_\_**  
**but less dense than \_\_\_\_\_**

**Object 3 is more dense than \_\_\_\_\_**  
**but less dense than \_\_\_\_\_**

7. Rewatch the video from the beginning of the lesson. Can you describe what is happening? Can you describe it using the word “density?”



### **Here's what I did today!**

Today I visited the virtual PROMISE laboratory at Sanford Research. I learned that density can be used to describe matter. If something is very dense, it has many atoms packed closely together. I created a density tower out of different liquids and I saw that each liquid had a different density. I also learned that plastics are separated by density and that doctors can use density to separate different parts of our blood.