Name _____ **Period** _____

Color Densities

DENSITY is the amount of mass per volume a substance has. When you have 2 different substances, the more dense substance will sink and the less dense substance will rise.

OBJECTIVE:
To answer: **Why/how do liquids form different layers?**

Materials
- 5 different colored solutions
- Clear drinking straws

Predict
You see a glass of soda with ice in it that has been sitting for an hour or so. The top looks a little lighter than the bottom of the glass. Your friend Maria explains that this is because the top layer is closer to the sun, but your other friend Joe disagrees and says it is because heat rises. Do you agree or disagree with Maria and/or Joe? Explain your reasoning.

PROCEDURE:
Using a straw in liquid, put your finger over the top to "catch" some of the liquid. Fill in the chart below. ***NOTE *** Please put all waste liquids in the waste container. DO NOT return to the original containers.***

CATCH (in this order)	**RESULT (which one is MORE DENSE and goes to the bottom of the straw??)**
Yellow & Clear	
Green & Blue	
Blue & Clear	
Red & Blue	
Clear & Red	
Green & Yellow	

CONCLUSION:
Put all the colors in ORDER from LEAST DENSE to MOST DENSE

CHALLENGE:
Stack all the colors in order in your straw!!!!!!!!!

PLEASE ONLY DUMP THE UNUSED LIQUIDS DOWN THE SINK!!!!!!!!!!

Explaining the phenomena
Draw your phenomena in the left box below. Use the ***particle model*** to explain your results in the right box below.

Draw the phenomena (your drawing should illustrate the layers you saw)	**Explain the phenomena** (your words should explain why the different layers stay in this certain order from bottom to top based on our particle model For Example: the red water contains more particles, so…)