

Name: _____

GR. 8 FLOATING CRAYONS

STEPS

1. Use the chart to the right to record your baseline data (the measurements you collect before starting the experiment).
2. Using the recording sheet on the back of this page, write all the crayon colours and predict the buoyancy ranking of each colour. (Write a 1 if you think it will float first, 2 for second, 3 for third, etc.)
3. Start by adding 1 tsp of salt to the water (or 1 tbsp, depending on time – ask your teacher for instructions). Stir and observe.
4. When a crayon floats, record the actual floating order (ranking) and the amount of salt needed to make that crayon float on your recording sheet.
5. Repeat Step 3, adding 1 tsp (or 1 tbsp) of salt at a time until all the crayons float or you run out of salt.
6. Once all the crayons float, measure the total mass of the saltwater solution with the crayons in it and record this as your final weight.
7. Using your recorded masses, calculate the density of both the water and the saltwater solution.
8. Compare the density of the water with the density of the saltwater solution.



BASELINE DATA	
Mass of the measuring cup (in grams)	
Mass of the cup with 500ml of water (in grams)	
Mass of crayons (in grams)	
Total mass of the cup, the water and the crayons (in grams)	

EXPERIMENTAL DATA								
Crayon Colour								
Predicted Rank								
Actual Rank								
After how many teaspoons (or tablespoons) of salt did it begin to float?								
FINAL DATA			Calculate Density (density = mass/volume)					
Total mass (with cup, water, salt, crayons in grams)			Density of water:					
Total mass of salt (in grams)			Density of saltwater:					