Name: _____ Date: _____

Can Eggs Float?

We have all seen helium balloons floating up in the sky. Helium floats because it is less dense than air… there are fewer particles in the same amount of space in helium than there are if air. You are going to try to add so many particles of salt to water that an egg will be less dense than water, and will therefore "float".

Problem: How much salt does it take to get an egg to float on water?

***Before you can hypothesize about this, you need to find out how much a gram of salt is. We will do this in class as well as set up your science journal for this experiment. To do this, we will take a piece of loose-leaf paper and find it's mass on the triple beam balance and record the mass here: _____ g.

When you have one gram of salt, take a look at how much salt there is, and use that information to answer your hypothesis.

Hypothesis: IF I add _____ grams of salt to fresh water, THEN I will be able to float an egg BECAUSE…

_____

_____

_____

VARIABLE: _____

Materials: Salt, 1L container, ½ L water, egg

Procedure:

1. Add water to container.
2. Add salt ONE GRAM at a time (mix thoroughly with water).
3. After each addition of salt, put the egg in the container to see if it floats.
4. When the egg floats record the number of grams required for your egg to float.
5. If you have additional time, complete another trial following the same steps.

(SEE SIDE TWO)

Data: Total grams of salt required to float an egg: _____ (Did you add units?)

Trial two (if applicable) _____

Conclusions:

1. How many grams of salt were required to float and egg on top of fresh water? _____ g.
2. Why did adding salt to water make the egg float?
   _____
   _____
3. Will people floating in an ocean find it easier or harder to float compared to fresh water?
   _____ (Yes or No?) Why? _____
4. Was your hypothesis right or wrong?
   _____
   _____