EXPERIMENTS

PRACTICE:

SALT AND EGG LAB

MS. WINKLE

DIRECTIONS:

- Scan and upload your answers for the salt and egg lab that we did in class together. Make sure you upload all responses to the sections that are listed on the following slides.
- **You have these answers already in your journal! Don't print this! Just turn in what is already written down.**

SALT AND EGG LAB – PROBLEM STATEMENT

How does different amounts of salt affect an eggs ability to float?

- What is being changed?
- What is being measured?

SALT AND EGG LAB – HYPOTHESIS

USE WHAT YOU KNOW ABOUT DENSITY TO FILL IN THE BLANKS FOR THE FOLLOWING HYPOTHESIS:

IF DIFFERENT AMOUNTS OF _____ ARE ADDED TO WATER, THEN THE EGG WILL FLOAT IN THE CUP WITH THE _____.

SALT AND EGG LAB – VARIABLES

Write out the variables for this experiment:

- Independent variable (what is changing between the groups?):_____
- Dependent variable (what can you measure to find the answer to the problem statement?):_____
- Constants (what needs to stay the same for all the groups?): _____
- Control Group (which is the group that is "normal"/ independent variable not applied?):_____

SALT AND EGG LAB – DATA TABLE

FILL IN THE FOLLOWING TABLE WITH THE DATA:

TITLE: HOW SALT AFFECTS ABILITY OF AN EGG TO FLOAT

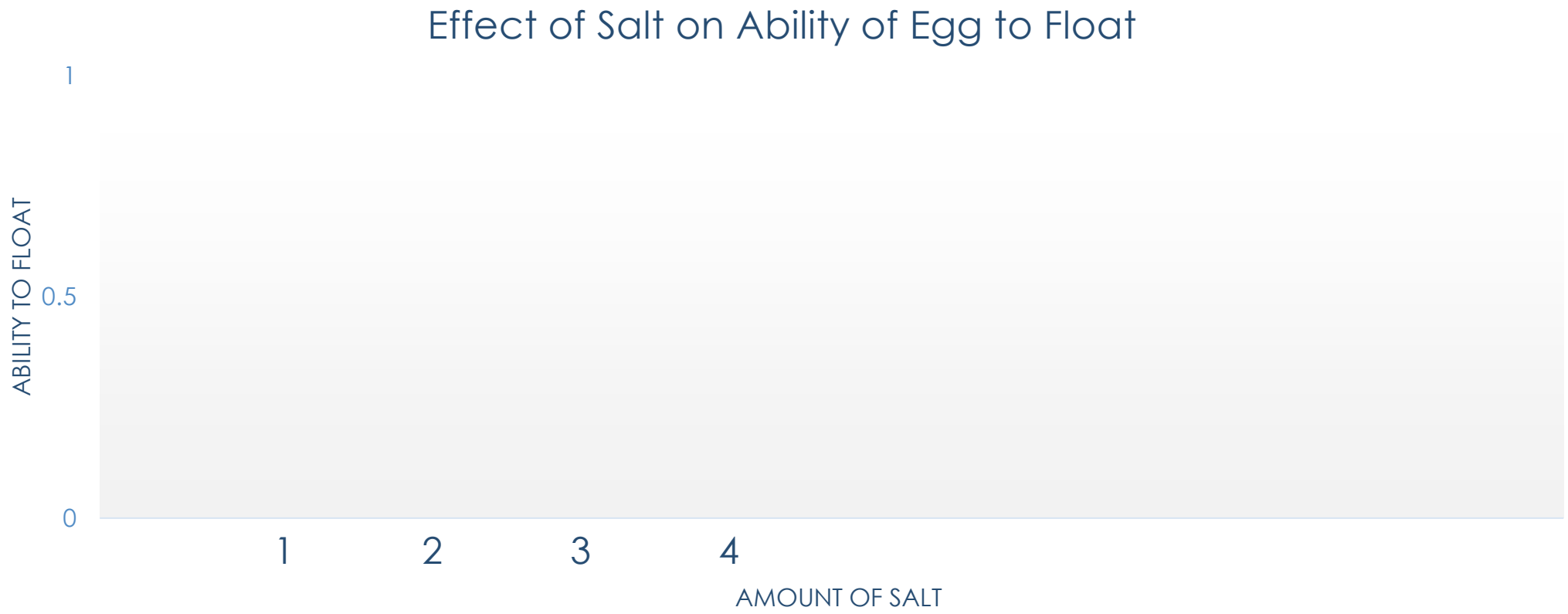
Amount of Salt	Trial 1	Trial 2	Trial 3	Average
0 tsp				
1 tsp				
2 tsp				
3 tsp				
4 tsp				

Average:

$$\frac{(\text{trial 1} + \text{trial 2} + \text{trial 3})}{3}$$

0 = DID NOT FLOAT; ½ = FLOATED HALFWAY; 1 = FLOATED AT TOP

SALT AND EGG LAB – DATA GRAPH



SALT AND EGG LAB – RESULTS

RESULTS: PUT YOUR TABLE AND GRAPH INTO WORDS. DO NOT EXPLAIN WHY IT HAPPENED, JUST DESCRIBE WHAT HAPPENED.

- FOR THE CUP WITH NO SALT, THE EGG _____. FOR THE CUP WITH THE MOST SALT, THE EGG _____. TOGETHER, THESE RESULTS SHOW THAT AS THE AMOUNT OF SALT INCREASES, THE ABILITY FOR THE EGG TO FLOAT _____.

SALT AND EGG LAB – CONCLUSIONS

Conclusion Planning:

1. Was the hypothesis supported or disproved by the results?

2. What errors could have occurred in the experiment? (for example, did anything spill?)

3. What can be done in the future to make the experiment better?

4. Why did the amount of salt cause the egg to float?

5. How can this be used in the real world?


SUCCESS!
MAKE SURE YOU TURN IN RESPONSES FOR A CLASSWORK GRADE