

Name _____

Scientific Investigation Worksheet: Floating eggs???

Step 1 – Question – What do you want to know

Can I get an egg to float?

Variables I will keep the same

- egg, temperature of water, amount of sugar in each spoon
-

Variable I will change: **how much sugar is in the water**

Variable I will measure: **does the egg float?**

Step 2 – Prediction – What I think will happen . . .

If I _____
refer to changed variable

then I predict _____
refer to measured variable

Step 3 – Materials – What I will use . . .

- 1 cup
- water in cup, close to 2/3rds full (so it's obvious that the egg sinks or floats)
- sugar
- spoon
- egg

Step 4 – Procedure – The steps I will take . . .

1. test the egg in water, does it float?
2. REMOVE egg.
3. add one level spoonful of sugar, stir until it dissolves
4. test egg again, does it float? record observation and remove egg.
5. repeat steps 3-4 until egg floats

Step 5 – Data collection (my observations during the experiment):

TRIAL 1:		TRIAL 2: (if there's time)	
Amount	Result (float or sink?)	Amount	result
<u>1 sp</u>	_____	_____	_____
<u>2</u>	_____	_____	_____
<u>3</u>	_____	_____	_____
<u>4</u>	_____	_____	_____
<u>5</u>	_____	_____	_____
<u>6</u>	_____	_____	_____

Overall Results (What was observed using multiple trials from the class.)
Amounts needed by different groups to make an egg float using sugar:

Step 5 – Conclusion

My prediction _____
(state prediction)

was _____
(Supported or not supported by the data)

Concluding statement: _____

Questions for discussion: Would a boat in the ocean (salt water) be able to carry more weight than the same boat in freshwater? How could you test this in the classroom? What might cause variation in results between groups? What would you predict for large vs. small eggs—which would require more sugar to float? Why?