

Name: _____

Eggcellent Eggperiment

Purpose

One of the cell organelles you learned about in Chapter One is the cell membrane. Now you will model how a cell membrane works to let water and other materials leave the cell. Using a chicken egg as a model for a cell, you will soak the egg in various liquids and observe how the size of the egg changes as it takes on or loses water through the membrane. You will keep a daily record of observations and measurements of the egg.

Materials

Cup	Balance	Water
Egg	Ruler	Salt
String	Vinegar	Dye

Procedures

1. Obtain egg, put your name on your cup.
2. Record your hypothesis in complete sentences.
3. Find the mass (g) and circumference (cm) of your egg and record in data table along with any other observations. Use the triple beam balance to find the mass. Use the string and ruler to find the egg's circumference.
4. Soak the egg in vinegar for three days to dissolve the shell and expose the membrane.
5. For each subsequent day you will calculate the amount of change in mass and circumference by remeasuring the egg. Each day you will record a hypothesis that addresses the effect the new liquid will have on the egg.



Hypotheses

Day	What will happen to the egg when soaked in each solution overnight?
9/8	
9/11	
9/12	
9/13	
9/14	
9/15	

Data & Observations

Day	Liquid	Observations	Mass (g)	Circumference (cm)	Difference +/-
9/8	Vinegar				
9/11	Water (plain)				
9/12	Water (with dye)				
9/13	Water (with salt)				
9/14	Your Choice!				
9/15	_____				

Conclusion

Day	Did the results support your hypothesis, why or why not?
9/11	
9/12	
9/13	
9/14	
9/15	