

Egg Lab

Objective: In this investigation, you will use a fresh hen's egg to determine what happens across membranes.

Expectations: Please be very careful with your egg and writing in your data. Stay in your seat and clean up when you are done.

Procedures (Steps in the Experiment):

Day 1 (A Day Class)

1. Use paper to label the cup with your names, class period, and table number.
2. Write all your names, the class period, and table number on the worksheet.
3. Define weight.
4. Determine the weight (mass) of the egg by weighing it on the balance and record in the data table. (see step 3 in lab sheet)
5. Define volume.
6. Determine the volume of the egg. First, place 150 ml of water in a beaker. Next, place the egg in the water and record the volume in the data table. (see step 4 in lab sheet)
7. Carefully place the raw egg (with shell) into the cup. Add 150 ml of vinegar to the cup & cover the cup with tin foil.
8. Allow the jar to sit for 24 to 48 hours.

Day 2 (B Day Class)

1. Write your names, class period on the lab sheet as well as the cup with egg you will be observing.
2. Review the information from the day 1 worksheet and complete day 2 activities.
3. Pour off the vinegar.
4. Carefully remove the egg to a paper towel & pat it dry.
5. Mass the egg on an electronic balance & record.
6. Determine the volume of the egg. First, place 125 ml of distilled water in the cylinder. Next, carefully place the egg in the water and record the volume in the data table.
7. Carefully place the egg and distilled water into the cup & cover.
8. Allow it to sit for 24 to 48 hours.
9. Answer day 2 questions on your worksheet.

Day 3 (A Day Class)

1. Discard the distilled water.
2. Carefully remove the egg to a paper towel & pat it dry.
3. Mass the egg on an electronic balance & record.
4. Determine the volume of the egg. First, place 125 ml of syrup in the cylinder. Next, carefully place the egg in the syrup and record the volume in the data table.
5. Carefully place the egg into the cup & cover the egg with clear syrup.
6. Allow it to sit for 24 to 48 hours.
7. Answer day 3 questions on your worksheet.

Day 4 (B Day Class)

1. Pour off the syrup.
2. Carefully remove the egg & rinse off the excess syrup under slow running water.
3. Pat the egg dry on a paper towel.
4. Mass the egg on an electronic balance & record.
5. Determine the volume of the egg. First, place 150 ml of water in the cylinder. Next, carefully place the egg in the water and record the volume in the data table.
6. Clean up your work area & put away all lab equipment.
7. Answer day 4 questions on your worksheet.

Teacher Notes:

Each student must have the following information in their own note page in their binder:

- Definition of terms.
- Diffusion observations.
- Answers to the application questions.