

Name:

Class:

Date:

Activity 11.1A: Egg Dissection Lab Guide

Materials Needed

- 1 regular chicken egg per group
- Examination gloves
- Bamboo kitchen skewers or toothpicks (3–4 per group)
- Paper towels
- Disposable bowls (two per group)
- Sanitizing wipes
- Lab worksheet

Instructions

Follow the numbered steps for dissecting an egg and recording your observations.

Safety Note

Raw eggs can contain harmful bacteria and are growing mediums for pathogens; do not touch your mouth or eyes after touching raw eggs. Use gloves when handling the eggs and ensure your work area is completely clean and sanitized after you have completed the lab.

Egg Dissection

1. Carefully crack the egg in half, trying to split the egg as closely down the center as possible. Pour the contents into one of the bowls. Place the empty shell on a folded paper towel (to prevent it from getting on the desk).
2. Look in the empty shell halves. Locate the air cell/pocket. It will probably be on the top or bottom of the shell. When you press on it, you should feel the air bubble. Some air cells/pockets may be on the side of the egg, but this is very rare. Once you have determined which end of the egg the air cell is in place that half on your lab worksheet.

- A. Was the air cell in the top (pointier) or bottom (rounder) portion of the egg?

Answer:

3. Split the remaining half of the shell into two pieces and use your fingers to pull and remove the shell membrane. It will be fragile and very thin. Place the

removed membrane and the outer shell with the membrane removed on the lab worksheet.

- A. What does the shell membrane look like? Does it remind you of anything?

Answer:

4. In the bowl containing the yolk and albumen (white), try to find the division between the thin and thick albumen. You can use your skewers to gently poke the different types of albumen. Be careful not to pierce the yolk.

- A. Describe the difference between the thick and thin albumen. Discuss consistency, color, etc.

Answer:

5. Locate the chalazae. It will be the twisted white string-like structure coming off of the yolk. Using the pointed end of the skewer, gently remove the chalazae without piercing the yolk. Place the chalazae on your lab worksheet. (Note: if your yolk breaks, see your instructor for a replacement egg.)

- A. How long do you think your chalazae is? What consistency is it?

Answer:

6. Place your empty bowl on the table. Pick up the bowl with your egg in it. Take a gloved hand and place it below the bowl containing your egg with the fingers spread slightly. Gently tip the bowl so the albumen falls into the bowl on the table and the yolk is in your hand, just like separating eggs for baking. Be careful not to break the yolk. Place the bowl containing the albumen in the designated area on your worksheet.

- A. What observations did you make about the albumen as it passed from the top bowl into the bottom?

Answer:

7. Place the bowl containing the yolk in its designated area on the specimen sheet as well. At this point, use your skewer to puncture the yolk.

- A. What do you observe about the yolk flowing out? Can you separate the yolk membrane?

Answer:

8. Ask your instructor to check off your completed lab worksheet.

Instructor Signature:

Answer:

9. After your instructor signs off on your worksheet, clean up your work area. Make sure to dispose of your specimen, the skewers, the bowls, and the worksheet in the garbage. Remove your gloves and dispose. Wipe your table and/or counters down with sanitizing wipes.

Name:

Class:

Date:

Egg Dissection Lab Worksheet

Place each specimen in the designated area. Once you have completed the steps in the guide, show them to your instructor.

<p style="text-align: center;">Air Cell/Pocket</p>	<p style="text-align: center;">Outer Shell</p>
<p style="text-align: center;">Shell Membrane</p>	<p style="text-align: center;">Chalazae</p>
<p style="text-align: center;">Albumen</p> <p style="text-align: center;">Place bowl on left side of paper</p>	<p style="text-align: center;">Yolk</p> <p style="text-align: center;">Place bowl on right side of paper</p>