

Carolina's Perfect Solution® Frog Dissection

Carolina's Perfect Solution® frog dissection introduces students to basic vertebrate anatomy. This activity allows students to identify the major external features of the frog and gain a better understanding of vertebrate internal tissues, organs, and systems. This activity supports 3-dimensional learning and builds toward the following:

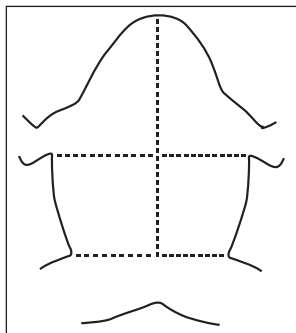
- NGSS Scientific and Engineering Practice: Developing and Using Models
- NGSS Core Ideas: Life Science 1: From Molecules to Organisms: Structures and Processes; Life Science 4: Biological Evolution: Unity and Diversity

Materials Required

Carolina's Perfect Solution® Frog (227444)
Carolina® Frog Dissection Mat (229920)
Carolina® Adjustable Safety Glasses (646705)
Laboratory Aprons Value Pack (706245)
Nitrile Disposable Gloves (706335, 706336, 706337)
Disposable Tray
Scissors

Activity Procedure

1. Obtain a Carolina's Perfect Solution® frog. Place it on a dissecting tray, dorsal-surface up.
2. Observe the external anatomy of the frog. Identify the different structures listed below:
 - a. Skin
 - b. Eyes
 - c. External nares
 - d. Eardrums or tympanic membranes
 - e. Upper extremities
 - f. Lower extremities
 - g. Interior of the frog's mouth
 - i. Tongue
 - ii. Vomerine teeth
 - iii. Maxillary teeth
3. Pinch the loose skin at the center of the frog's stomach, and make an initial cut with the scissors into the skin.
4. Cut through the skin, following the pattern shown in the diagram. Follow the same pattern to cut through the muscle and reveal the internal organs.
5. Identify the following internal structures:
 - a. Liver
 - b. Gallbladder
 - c. Stomach
 - d. Small intestine
 - e. Large intestine
 - f. Spleen
 - g. Heart
 - h. Lungs
 - i. Fat bodies



Safety

Have students wear safety glasses or goggles, gloves, and lab aprons when dissecting.



Results/Summary

Students should gain a better understanding of vertebrate anatomy. Frog dissection is an excellent introductory-level activity for students to explore tissues, organs, and systems and to learn about vertebrate anatomy. Challenge students to investigate similarities and differences between humans and frogs as they compare amphibians and mammals.

Additional Information

View more information, content links, and products related to this activity at www.carolina.com/takeaways.

