

SCIENCE
SECONDARY EDUCATION (GRADES 9-10)
INTERMEDIATE

LESSON PLAN: In this lesson, students will get the opportunity to experience virtual frog dissection, potentially prior to completing a real-life dissection.

STEPS TO CREATE ACTIVITY:

This activity requires that each student (or small group of students) has access to an iPad with the app “FrogDissection” downloaded.

1. Introduce the class to the frog dissection lesson by discussing the anatomical features.
2. Discuss what to expect during frog dissection.
3. Instruct the students to open the FrogDissection app on their iPads.
4. Give the students a few minutes to explore the app, but tell them *not* to “Start Dissection.” Note: Use the home (house) icon to return to the main menu.
5. Provide the students with guided questions to encourage them to search through the app to find the answers. You may require written responses to each question.
 - a. Sections, with potential questions:
 - i. Frog Lifecycle
 1. Compare and contrast the physical appearance of the egg/tadpole/frog across the lifecycle.
 - ii. All About Frogs
 1. What is the scientific classification of frogs?
 2. Describe the distinguishing features of a frog.
 3. Explain what and how frogs eat.
 4. What are the special senses of a frog? How are they similar or different from the special sense of humans?
 5. Describe the life cycle of the frog, from egg to adult frog.
 6. Name three internal organs and describe their function.
 7. Summarize the components and functions of the digestive/respiratory/circulatory/lymphatic/nervous/excretory/reproductive system of the frog.
 8. Compare and contrast frogs and toads.
 - iii. Human vs. Frog
 1. Compare and contrast humans and frogs.
 - iv. Wet Lab Process
 1. Write each step of the Wet Lab. Draw your own picture to illustrate each step. Which step do you think is the most important and why?
 - v. Internal Organs (3D)
 1. Choose two organs. Name the organ and provide a brief description.
 - vi. Videos

1. Watch one video. Summarize what you learned.
- vii. Types of Frogs
 1. Choose one type of frog. Name and describe your type of frog. Draw a picture of your frog.
 - viii. Quiz
 1. Work together with your group to take the quiz. What questions were particularly challenging? Easy?
- b. Encourage the students to work independently or in small groups to complete the virtual dissection.

CITATION:

None

iPad App: FrogDissection by PunFlay

STANDARDS MET:

CCSS.ELA-Literacy.RST.9-10.2 Determine the central ideas or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.

CCSS.ELA-Literacy.RST.9-10.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.

CCSS.ELA-Literacy.RST.9-10.7 Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.