

Practice B Teacher Instructions

In the Field: EJ the Naturalist

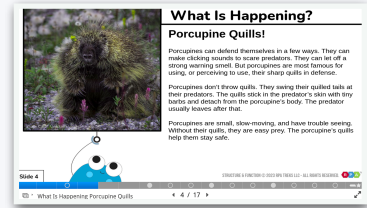
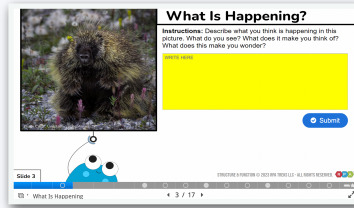
Objective: Each student will be able to recognize structures and functions, to identify how organisms survive in an environment.

- “I can explain how an animal’s body helps it survive in their environment.”
- Students actively read and reflect as conservationists to help a classmate make a descriptive investigation for protecting animals at a pond.
- Academic Terms: camouflage, countershading, predators,

What is Happening?

Digital Student Journal Slides 3-4

Click slides to enlarge

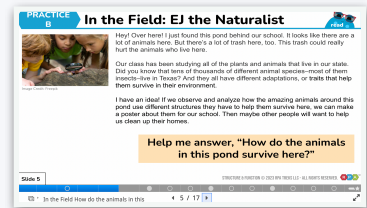


Description: Phenomenon-based approach for any classroom setting. This attention-getter can be used as either a cooperative learning strategy for engagement or as an individual reading opportunity to activate prior knowledge.

There is no correct or uniform answer for these connections. However, students should be able to relate information from 3rd, 4th, and possibly 5th grade to these terms using examples they have either directly observed or learned about previously. Be sure to provide time for students to make observations about the image before moving on to the description on previous slides. Encourage full sentences in the written descriptions.

In the Field: EJ the Naturalist

Digital Student Journal Slide 5 - Click slides to enlarge



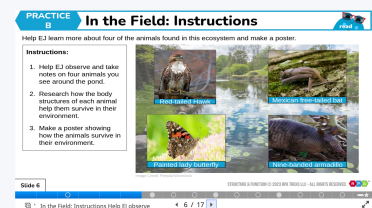
Description: Students help their classmate EJ with a descriptive field investigation about animals living in a pond, to help promote conservation.

Students observe a photo of the pond and its inhabitants and learn about the physical traits of the animals. They read a short passage about the Painted Lady Butterfly, to research how animals’ body parts help them survive. The students use this information to make a poster to help answer the research question, “How do the animals in this pond survive here?”

Previous to 5th grade, students identified external structures and functions of different animals and how those structures helped them meet basic needs for survival. During the In the Field activity, students will apply the same concepts.

In the Field: Observing

Digital Student Journal Slide 6 - Click slides to enlarge



Description: Students are introduced to the featured character and also read their activity instructions.

In the Field: Observing

Digital Student Journal Slides 7 - *Click slides to enlarge*

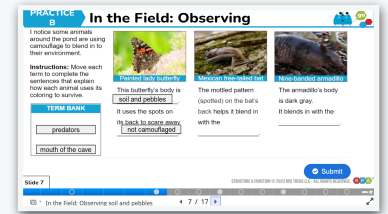
Description: Students finish sentences with words from the term bank.

Answer Key

This butterfly's body is not camouflaged. It uses the spots on its back to scare away predators.

The mottled pattern (spotted) on the bat's back helps it blend in with the mouth of the cave.

The armadillo's body is dark gray. It blends in with the soil and pebbles.



In the Field: Researching

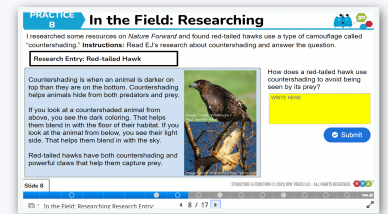
Digital Student Journal Slides 8 - *Click slides to enlarge*

Slides 8-11 each feature an animal that lives in this pond ecosystem and describe how their unique structures function in ways that help them survive there. Students are prompted to explain how that feature helps the organism survive.

Description: Based on an adapted passage using resources from Nature Forward, students explain how countershading in red-tailed hawks helps this species survive.

Answer Key

The red tailed hawk's body is reddish brown on top and white on bottom. This type of camouflage is called countershading. It helps the animal blend in with the sky if you look at it from below, and the tree branches if you look at it from the side or above.



Recurring Themes & Concepts Spotlight

5.5F Explain the relationship between the structure and function of organisms.

Organisms have developed many different structures that function in their survival. Some of the structures are designed to make the organism look more fierce or dangerous. The "eyespot" on a butterfly's wing fool predators into thinking it is a different, more dangerous organism.

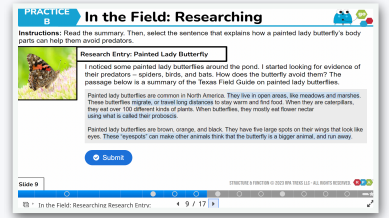
In the Field: Researching

Digital Student Journal Slide 9 - *Click slides to enlarge*

Description: Students read a short passage, then select a sentence that shows how a structure helps the Painted Lady Butterfly avoid predators.

Answer Key

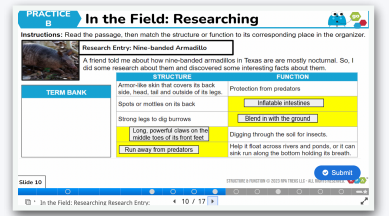
These “eyespot” can make other animals think that the butterfly is a bigger animal, and run away.



In the Field: Researching

Digital Student Journal Slides 10 - *Click slides to enlarge*

Description: Students review and match the Structure and Function descriptions for the Nine-banded Armadillo that help explain how each featured structure supports a function that helps the species survive.



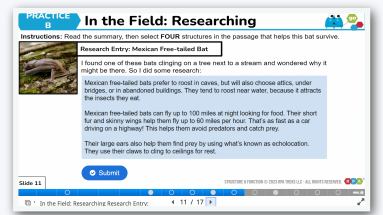
In the Field: EJ the Naturalist

Digital Student Journal Slide 11 - *Click slides to enlarge*

Description: Students read a short passage about Mexican Free-tailed Bats, then select specific structure terms that relate to functions that help them survive in their environment.

Answer Key

fur, wings, ears, claws



Pulling It Together

Digital Student Journal Slide 12-14 - *Click slides to enlarge*

Description: Students use the information they have learned from to answer the questions. They read a short passage and use the information to select an answer, and identify animals using structures to avoid predation.

