



Classroom Teacher Preparation

Life Science 28: Camouflage and Mimicry

Please use the following to prepare for the next SfS lesson.

Description:

Camouflage and mimicry are explored as examples of animal adaptations that increase chances of survival. Students play a hunting game to gain an appreciation of the problems that these adaptations pose for predators. Classes with more time can continue to explore different examples of camouflage and mimicry.

Lesson Objectives – SWBAT (“Students Will Be Able To...”):

3rd-5th

- Explain what camouflage is and provide examples of how different organisms use camouflage
- Describe mimicry and explain how defenseless animals are protected by it

Disciplinary Core Idea (DCI)

LS1 From Molecules to Organisms: Structures and Processes - LS1.A Structure and Function

- (3rd-5th) Organisms have both internal and external macroscopic structures that allow for growth, survival, behavior, and reproduction.

Science & Engineering Practice (SEP)

Planning and Carrying out Investigations

- (3rd-5th) Make observations and/or measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon or test a design solution.

Crosscutting Concept (CCC)

Cause and Effect: Mechanism and Prediction

- (3rd-5th) Cause and effect relationships are routinely identified, tested, and used to explain change.

Preparation:

This module serves as an introduction to the topic.

Room Set Up for Activities:

Students will work in pairs at their desks to complete the camouflage hunting game.

Safety:

There are no safety concerns for this lesson.



Related Modules:

This lesson may be taught as part of a sequence or group of related modules on **Life Science**. Modules include:

Life Science 5: Food Webs – Students will work in groups to assemble a food web of a Yellowstone ecosystem and then analyze how their model is affecting by adding or removing species.

Life Science 8: Owls – The physical and behavioral adaptations that make owls excellent (nocturnal) predators are reviewed. Students then examine an owl pellet and identify the bones found within.

For other module sequences and groups, look here: www.sciencefromscientists.org/sequences

Standards Covered:

Please click the following link to our website to review the standards covered by this lesson, listed by state:

www.sciencefromscientists.org/standards/

Lessons are matched to both national NGSS and local state standards.

After Our Visit:

Extend this lesson by analyzing how color affects an animal's ability to survive in certain environments by simulating the real-world example of the peppered moth.

Access this Extension activity by visiting the Classroom Post found on our website at sciencefromscientists.org/cohorts. Use the name of your school/cohort and password to log in.

To help Evaluate, check out our Open Response questions online at sciencefromscientists.org/open-response-questions. They are freely available for all of our lessons for current teachers. Use the password supplied by your instructor to log in.

Additional Resources:

- Camouflage: Animal Hide and Seek (4:26): <https://www.youtube.com/watch?v=YOIRci0CKzg>
- Animal Tricksters (3:43): <https://www.youtube.com/watch?v=YOIRci0CKzg>
- Amazing Octopus camouflage (1:03): <https://www.youtube.com/watch?v=PmDTtkZIMwM>