

Camouflage for Survival

Grade Level: This lesson is designed for a 4th grade class.

Science Concept:

Animals use camouflage to blend in with their background in order to survive. They survive by either hiding from their predators or hiding to sneak up on their prey.

Relationship to California Science Content Standard:

3. Living organisms depend on one another and on their environment for survival. As a basis for understanding this concept:
 - b. Students know that in any particular environment, some kinds of plants and animals survive well, some survive less well, and some cannot survive at all.

Learning Objective:

Students will describe the use of camouflage for a snake's survival within its environment.

Evaluating Ideas:

Formative:

As a group students will have a discussion answering the question:
How does camouflage help a snake survive?

Summative:

A paragraph will be written describing how and why snakes use camouflage.

Conceptual Background:

Most species of snakes are colored and patterned in a way that conceals them in their natural habitat, reducing the risk of detection by predators and helping them stay hidden from potential prey.

Vocabulary:

- *Camouflage:* the hiding or disguising of something by covering it up or changing the way it looks.
- *Predator:* an animal that lives mostly by killing and eating other animals.
- *Prey:* an animal hunted or killed by another animal for food.
- *Procrystis:* (scientific term for camouflage in animals)

Implementation Plan:

This lesson can be done individually or as a group.

Engage:

Have student create a picture of an animal using camouflage to survive; either for safety from a predator or to catch their prey. They will share their picture with the class, giving an explanation.

Explore:

Give students KWL Chart for them to list all that they know about camouflage being used for survival, and what they want to learn.

Activity: Show students pictures of animal using camouflage for survival. *see* (Camouflage slide show)

Have a discussion with the slides.

Explain:

Camouflage does not work by itself, animals need to become completely still. Even the most effective camouflage can fail if a hidden animal suddenly moves and catches the enemy's eye. Lead students in a game that will reinforce the concept that movement can attract predators' attention.

Elaborate:

Activity: Game (similar to red light green light)

Hawk and prey

You will need two or three student volunteers to be “hawks.” The rest of the class will be prey. Have the class move about the room (no running) while pretending to be small animals (such as songbirds, squirrels, and so on). When you call out “Hawk!” the prey must freeze. The hawks will then visually search for movement; any student that moves even slightly must take his or her seat. Afterwards, discuss with the class what would really happen in the wild. Why is camouflage alone not enough protection?

Evaluate:*Formative:*

As a group students will complete their KWL chart with they learned, then discuss their charts. Teacher will correct any misconceptions.

Summative:

A paragraph will be written describing how and why snakes use camouflage.

Differentiation Plan:

Behavioral for student A

Students will be responsible for keeping students on task in their group.

Cognitive for student B

In summative assessment, student can give simple sentences that answer questions.

Cognitive for student C

Student can write two paragraphs instead of one in summative assessment.

Affective for Student D

Student can be class helper.

Language Demand for Student

E Student can make a personal dictionary to help with terms.

F A scaffolded outline will be provided.

G Students can write sentences for the vocabulary words.

List of Materials:

Crayons

Paper

pencils

Suggested Reading:

--Stafford, P. (2000). Snake. United States of America: Smithsonian Institution Press

Name: _____

Date: _____

Camouflage for Survival KWL Chart

(K) What I know	(W) What I want to know	(L) What I have learned

Name: _____

Date: _____

Camouflaged words

Directions: Find the hidden words you learned in the lesson.

tat	pro	ceal	da
vi	end	nd	hi
de	ca	ey	tern
sis	age	bi	bl
pre	con	val	mou
fl	pr	ha	cryp
fi	pat	sur	tor

1. _____ 5. _____ 9. _____

2. _____ 6. _____ 10. _____

3. _____ 7. _____ 11. _____

4. _____ 8. _____

Name: _____

Date: _____

Camouflaged words

Answer Key **Directions:** Find the hidden words you learned in the lesson.

tat	pro	ceal	da
vi	end	nd	hi
de	ca	ey	tern
sis	age	bi	bl
pre	con	val	mou
fl	pr	ha	cryp
fi	pat	sur	tor

1.camouflage

5.predator

9.hide

2.prey

6.procrypsis

10.blend

3.pattern

7.conceal

11.find

4.habitat

8.survival

