

Corn Snake Lesson Plan

GRADE LEVEL: 1st grader

SCIENCE CONCEPT: This lesson is designed to teach students about snakes, particularly the characteristics of their skin and how it relates to their habitat. This lesson will provide each student with an opportunity to practice inquiry-based observations, allowing students to formulate and test their hypothesis.

SCIENCE CONTENT STANDARD: 2a. Students know different plants and animals inhabit different kinds of environments and have external features that help them thrive in different kinds of places.

LEARNING OBJECTIVE: Student will construct an egg-carton snake that shows the directional and colorful scales of snakes.

CONCEPTUAL BACKGROUND:

Habitat: This may be the first time students will hear of the term *habitat*. It is often defined as an area attached to the natural environment in which an organism lives, or the physical environment that surrounds a species or population. In simple term, it is where an animal is best suited to live. Snakes are no exceptions and have built different physical characteristics that help them survive and succeed in their particular habitat. To begin learning about habitat, it's important for students to understand that all animals live in a habitat that is suited for them. You may show pictures or web images as examples, and discuss with the class the blending characteristics. Here are examples.

Scales: Some snakes have rough and tough scales to protect them from rocks and plants as they crawl around while others have silky scales that helps them glide through dirt and leaves. Large scales are usually on the bottom of the snake. They help the snake move more easily along the ground. The scale will overlap each other. The smaller ones are on top to help protect the skin and muscles.

Scale colors: Snakes come in many different shapes and colors, all covered in scales. The scales are colored to help the snakes blend into their environment, as well as hiding them from possible predators. This is called camouflage.

LESSON IMPLEMENTATION PLAN: This lesson is designed as a guided inquiry exercise. Groups can have 3 to 4 students, each with two facilitators, a recorder, and a material manager.

ENGAGE – Begin by reading the story of *The Snake Who Was Afraid of People*, by Barry Louis Polisar. It's a fun way to get kids settled, and moved into the lesson.

Uncover the snake tank in front of the students, and introduce the snake by its common

name. This is a Corn Snake. After allowing a couple of minutes for the students to admire the snake, start providing guiding questions such as: Look at its skins. What do you notice? Where do you think his/her habitat is? Why do we call this snake a Corn Snake? Can you guess where they live? Tell the students that as researchers, they have to create ideas about a day in the life of this snake.

EXPLORE – Each group of 3 to 4 students will begin their inquiry by observing the snake. They will have 10 minutes to observe the snake’s behavior and movements. You may offer guiding questions to each group. Ask the students to imagine where this snake may live, and point out certain characteristics of the snake. “What can you tell me about the scales? Can you count the scales? What you do think the scales do?”

EXPLAIN – It’s sharing time. Keeping the students at their station, ask each group to share their thoughts and theories about the snake and where they think that snake lives. Ask them to also describe the snake’s skin. You may need to facilitate the questioning and add comments as needed. This is a good time to perform a formative assessment based on the discussion.

ELABORATE – Students will construct their own snakes using egg carton pockets from which they will select a habitat, and color the egg carton pieces to fit that habitat (they can be as creative as they wish). This will reinforce the idea that snakes have scales, and these scales have a specific direction to help them glide or climb, but also protect them against sharp objects. Upon completing their snake, each group needs to name their snake and introduce their “snake” to the rest of the class.

EVALUATE –

Summative: Students are to complete the “Scaly Sam” questionnaire.

Formative: Group presentations. Each group must present their “Egg Carton Snake” to the class and tell the class where the snake lives.

DIFFERENTIATION PLANS:

Behavioral Student(s):

When grouping, pair appropriately the student(s) to facilitate learning and support.

Reinforce good behavior. If classroom aide(s) are available, inform them of the task so proper support may be provided.

Cognitive for students A, B & C:

Strategies to enhance instruction would be:

- Introduction using literature.
- Developing active observation skills.
- Promote inquisitive questions.
- Using multiple standards during the “Scale” project.
- Extending understanding of group work.

Affective D:

Have the student(s) integrate with classroom peers to learn about science.

Language Demands for EL Students:

- Speak clearly and slowly.
- Using a vocabulary wall, ask the student(s) what *snake* is in Spanish (for example) and write it down. Promote participation of all languages.
- Allow time for reflection, use pauses, short sentences, and simple syntax.
- Use high frequency of specific terms and keywords.
- Provide clear examples and descriptions.
- Use verbal, hands-on resources, and gestures.

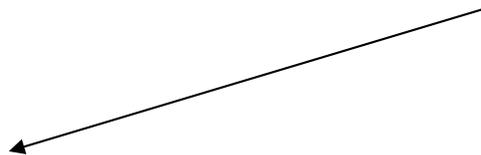
LIST OF MATERIALS (PER GROUP):

- Old newspapers to cover desks
- 2 palettes/tray of water paints
- 4 paint brushes
- 2 small plastic water containers
- 2 feet of red yarn
- 24 egg carton pockets
- 1 small cardboard washer
- One set of glue-on eyes

DIRECTIONS FOR MAKING THE “EGG CARTON SNAKE”:

Teacher’s preparation:

- Send home a letter to parents a week or two in advance asking to donate empty egg cartons for this project.
- Using a sharp pencil, perforate a hole in the base of each egg carton bases.
- You will need to cut out the egg cartons before class.
- Make a series of knots at one end of the yarn so a ball-like stop is created, then slide on the washer. LEAVE a couple inches off yarn pass
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Student's task:

1. Paint all the egg carton "scales" the color that best suits the snake's habitat.
2. Pass the yarn through the "scales" or egg cartons.
3. The last "scale" must be placed backward. That's the tail.
4. Ask the teacher to make a knot after all the scales are in place.
5. Glue on the eyes.
6. Give it a name.

The snake should look something like this:



Suggested Reading:

Simon, S. (1992). *Snakes*. New York, NY: Harper Collins Publishers.