

Design Scenario

Culminating Activity

The Scenario

Mrs. Tanis, your Life Science teacher, has a famous uncle, the herpetologist Salazar “The Slink” Slithers. Slithers has just returned from one of his adventures and brought back a treasure to share with your class – four baby snakes from around the world! While visiting your class, he received an emergency phone call asking him to go help a small remote South American village with an invasion of frogs. In a tizzy, he hands the snakes to your teacher and tells her to take care of them until he returns from South America.

Your teacher, being the quick thinker that she is, immediately decides to put your class to work. Your class has four new baby snakes to take care of, and each one is a different kind! What will you feed them? What kind of habitats do they need? Most importantly, why would anyone want to save snakes? Are they actually important and useful animals?

The Mission

Mrs. Tanis decides to make this slippery situation an exciting event for the whole school. She wants you to create a short video to share with the school that shows your peers all that you have learned about these interesting reptiles. Your video should include:

1. Information about the life cycle of a snake.
2. Anatomy of a snake.
3. How snakes move on the ground, in the water, and in the trees.
4. How snakes survive in the wild as both predator and prey.
5. The adaptations snakes have made to survive all these years in various environments and habitats
6. Myths and folklore behind snakes.

As junior herpetologists and wildlife filmmakers, it will be your job to research one of the snakes and create a three to five minute video on the snake of your choosing. Remember, your main goal is to find out if snakes are important and useful animals.

The Procedures

Step 1 – Snake Vocabulary:

Mrs. Tanis wants to make sure you know the meanings of some words related to snakes and that when you create your videos you will be required to use the correct terminology when discussing your snake.

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Visit the following Web site to gain an understanding of the correct terminology used when speaking about snakes: Merriam-Webster Online Dictionary <http://www.m-w.com/home.htm>

Reptile	Scales
Habitat	Vertebrate
Cold-blooded	Fangs
Lateral Undulation	Receptors
Concertina	Infrared
Rectilinear	Shedding
Slide-pushing	Anti-venom
Venom	Coiled
Habitat	Slithering
Predator	Herpetologist

Step 2: The Life Cycle of a Snake

Now it is time for you to learn about the life cycle of a snake. Using the **Snake Life Cycle** graphic organizer, visit the following Web sites:

Snakes Alive

www.thematzats.com/snakes/life1.htm

Natural Resources and Environmental Conservation

www.umass.edu/umext/nrec/snake_pit/pages/info.html

Document your findings within the graphic organizer for future use when making your video.

Step 3: Pick a Snake

Pick one of the four snakes that Dr. Salazar “The Slink” Slithers left with Mrs. Tanis.

Diamond Back Rattlesnake

Boa Constrictor

Garter Snake

Copper Head

Answer the following questions by going to the Web sites that follow:

Where does your snake live?

What is its habitat?

What is the life cycle of your snake?

What is the anatomical makeup of your snake?

What type of locomotion does your snake use to move along the ground, in the water, or in a tress?

How does your snake survive in the wild as both predator and prey?

What adaptations have snakes made to survive all these years in various environments and habitats?

What types of myths and folklore are there about snakes?

Eduscapes: Specific Snakes

<http://eduscapes.com/42explore/snake2.htm>

Animal Allsorts—The Reptile House

www.reptileallsorts.com/anatomy.htm

The Anatomy Section

www.icon.co.za/~mvdmerwe/anatomy.htm

Anatomy Of A Snake

<http://herpetology.com/anatomy.html>

Amphibian & Retile Index—Anatomy Of A Snake

www.kwic.com/~pagodavista/schoolhouse/species/herps/snkanat.htm

Step 4: Create a Model of Your Snake

Using the information you have obtained about your particular snake, you are to create a model of your snake for use in your video. Use the following steps to create your snake for demonstration purposes.

1. Determine the type of locomotion your particular snake uses to travel.
2. Using a pencil, punch a hole in the center of the base of each Styrofoam Cup and their lids.
3. Cut a piece of thick rope, twine, string, or yarn about 36 inches long.
4. Thread it through the holes in each Styrofoam cup and lid.
5. Space the cups apart.
6. Tie a large knot at both ends of the snake.
7. Leave about 5 inches after the knot at the head of your snake for pulling it.
8. Decorate your snake with markers and construction paper.
9. Cut a diamond-shaped head out of construction paper, and glue to the first cup on your snake.

Step 5: Saving the Snake – Fact or Fiction

As we already know, many people fear snakes and probably think Mrs. Tanis and “The Slink” are foolish for wanting to save four baby snakes. Using the information you have learned so far about snakes and information from the following Web site, include a section in your video explaining to the viewer why snakes are important, useful animals and the role they play in our ecosystem.

Snakes: Information for Missouri Homeowners

<http://muextension.missouri.edu/xplor/agguides/wildlife/g09450.htm>

Step 6: On to the Video

Now that you have done all of the background research, you will need to create your video presentations. Using the information that you acquired during your Web scavenger hunt, you are to create a three to five minute video informing your peers about the ecological benefits of snakes. You should include in your video the following information about snakes:

Anatomy	Life Cycle	Interesting facts and myths about snakes
Habitat	Manner of reproduction	
Sources of food and shelter	Where they evolved from	

Also, make sure to include the model you have constructed to demonstrate how your snake moves and any other information that you think is necessary to convey your message.
