



Upham Woods Grab and Go: Scales Scutes and Skins

Concept:

Understand what a reptiles is and what an amphibian is along with their specialized adaptations.

Age level:

All levels K-12

Education Standards:

Next Generation Science Standards
3-LS1-1 3-LS3-1 3-LS3-2 3-LS4-2
3-LS4-3 3-LS4-4 4-LS1-1 4-LS1-2
4-ESS3-1 5-LS2-1 MS-LS1-4
MS-LS1-5 MS-LS2-3 MS-LS2-4

Success Indicator:

Youth will be able to name the different types of reptiles and amphibians along with their specialized adaptations.

Preparation

Time: 20-30 Minutes

Space: Classroom

Materials:

- Venn diagram (2 hula hoops or something to draw on)
- List of adaptations on cards or written out

Reptiles:

- Have claws (exception: snakes)
- Young look like adults
- Scales & Scutes
- Lay eggs on land

Amphibians:

- No claws (exception: African clawed frog)
- Moist skin
- Lay shell-less eggs in water
- Young have an aquatic stage

Both

- Shed skin
- Cold blooded
- Have backbone

Background Information:

Wisconsin is home to numerous different reptiles and amphibians that have developed specialized adaptations in order to survive in their environments. People have given reptiles and amphibians a stigma in the past, claiming they are dangerous, scary, or disgusting, causing many people to be afraid of them. In order to help support these animals Scales Scutes and Skins aims to help youth gain insightful knowledge allowing them to see the value these creatures have.

Reptiles are animals that are cold-blooded. Most reptiles lay eggs and their skin is covered with hard, dry scales.

Amphibians are animals that are cold-blooded. They live the first part of their lives in the water and the last part on the land. When they hatch from their eggs, amphibians have gills so they can breathe in the water. They also have fins to help them swim, just like fish. Later, their bodies change, growing legs and lungs enabling them to live on the land. The word "amphibian" means two-lives, one in the water and one on land.

Reptiles:

Lizards
Turtles
Snakes
Crocodiles
Tuatara

Amphibians:

Frogs and Toads
Salamanders
(Newts & Mudpuppies)

Instructions for Adaptation game:

1. For this activity students will be paired up in order for them to be able to distinguish adaptations between reptiles and amphibians.
2. The instructor should either place two hula hoops on the ground forming a Venn diagram or draw one for the students to see.
3. Either pass out the cards with the adaptations written on them, or write the adaptations on the board next to the Venn diagram.
4. Have the students place or write one of the adaptations in the Venn diagram, and explain why he or she thought it should go where they put it.
5. Allow all students to do so until they are all in place.
6. Once they have finished, go through the adaptations individually, allowing the students to change responses, and giving them questions that will allow them to think deeper on the subject.

Deeper Thinking Questions:

1. Why do you think animals develop adaptations?
2. What advantages do you think reptiles have due to their adaptations? Amphibians?
3. When you think of reptiles and amphibians, what do you think of?
4. What can we do to help reptiles and amphibians?