



Reptiles and Amphibians, oh my!

Video #337

Developed for Grades: 2nd - 5th

The WOW videos have been developed to inspire students to learn more about **NGSS Life Science and/or Earth Science Disciplinary Core Ideas**. These could include:

- Plants and animals (including humans) can change their environment.
- Living things need water, air, and resources from the land.
- Humans use natural resources for everything they do.
- All organisms have internal and external structures that serve various functions in growth, survival, behavior and reproduction.
- Importance of ecosystems and habitats
- Cross cutting concepts like patterns, cause and effect, etc.

The WOW videos and their support documents can also be used with **English Language Arts**. Here are some ideas:

1. Select a few questions from the Know-It-All section and have students write their answers.
2. Have students write a story related to the topic. They could even add illustrations. For some grades students could read their stories and/or video tape their readings to share.
3. Students could write a poem, a play, or a song based on something in the video that created an emotional response for them.
4. Key words in the video can be used in creative writing assignments.
5. Older students could explore the difference in learning from video as opposed to a book. What are the advantages and disadvantages?

Answer Key for Know-It-All

1. They study reptiles and amphibians.
2. They are ectothermic animals so they get their heat from a source outside of their body, like the sun. They need to sun themselves on a rock or log in order to control their temperature. When they are warm enough they can retreat to a shady place so they do not get too warm.
3. Reptiles must lay their eggs on land while amphibians lay their eggs in water (or a moist environment). Reptiles are covered in scales to help protect them from water loss and predators. This helps them to live in some of our more arid environments. Amphibians have smooth skin that can absorb oxygen and help them breath, but require a moist habitat. This can make them more difficult to find in the drier California months.
4. Endo is Latin for “inside”, while ecto is Latin for “outside”. Endothermic means producing heat from inside the body using the energy that is released as a result of our metabolism from digesting food, while ectothermic means relying on outside sources for heat, like the sun.
5. Amphibians are born in water and then metamorphose, or change, so that they are able to live on land. Some Amphibians will continue to both live on land and in the water, while others will return to water (or a moist environment) to lay their eggs. There are some very large physical changes that must happen for an animal to change from breathing through using gills to using lungs. What an amazing transformation!

