

Teacher Guide

Which came first, the chicken or the egg? Video #325

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.
- 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?



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Answer Key for Know-It-All

- 1. Chickens are the smallest animals on our farm. Sophie reminded us that we have to talk quietly and walk slowly in the pen. How do you think chickens see humans? Do they see us as giant chickens? How do you think chickens know which humans are friendly and which ones are scary?
 - Answers may vary. Maybe chickens see humans as giants that have access to their favorite food. Maybe chickens don't differentiate between friendly or not, just "who is giving me tasty treats and not chasing me around".
- 2. Chickens are very common farm animals. In fact, some farms have nothing but chickens! In addition, many people keep chickens in their backyards. Why do you think chickens are so popular?
 - Chickens are popular farm animals because they are easy to care for, small, and give us eggs (which doesn't require harvesting the animal to enjoy).
- 3. Describe a healthy home for chickens. Remember to include the four basics: food, water, shelter and space.
 - Students' descriptions of a healthy home should include:
 - Food, such as pellets, seeds, corn, access to worms, and fresh plants
 - Fresh water to drink in an appropriate dispenser
 - Shelter in the form of their chicken coop that includes roosting bars, nest boxes, and straw or pine shavings
 - · Space with lots of fenced in area for them to run around
- 4. Chickens have no teeth. How do they "chew" their food?
 - When chickens swallow food, they first store the food in a pocket in their throat called a crop. The food then moves to the gizzard, which is an organ that grinds up the food into a mush. Chickens swallow rocks that stay in the gizzard to help with this grinding process.
- 5. Why do chickens roost at night?
 - Chickens roost at night because, when they used to roam around in the wild they had to sleep in a place that was off the ground to keep safe from predators. Even though domestic chickens are protected inside their coop they feel safest when they roost in an elevated place. Farmers give the chickens roosting bars, which looks like a ladder, and makes them feel safe.
- 6. Besides beaks and grabbing feet, what other adaptations do chickens have? Remember: an adaptation is a structure, or a kind of tool, that an animal has on its body to help it survive.
 - Chickens have many adaptations including (but not limited to) ... beaks to crack open food items and pick up seeds or bugs or rocks, feet that grip the roosting bars when they are relaxed, wings to help them "fly", a great sense of balance for being in trees, their colorful comb on top of their head releases heat so their brain doesn't overheat, they have eyes on the side to help them watch for danger, they have a crop and gizzard to help with digestion, and they take dust baths to kelp keep mites and bugs off of them so they stay healthy and comfortable.