



## A Wild Community

### Video #333

#### 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. **Use the following terms, introduced in the video, in a sentence or two: biotic, abiotic, and ecosystem.**
  - Answers may vary. One possible answer could be: An ecosystem is a natural community that includes abiotic and biotic factors. Abiotic elements are not alive and biotic elements are alive.
2. **Here are some examples of things that occur in nature, can you determine whether they are biotic or abiotic? If there is a biotic and abiotic relationship happening, explain it.**
  - An oak tree is biotic
  - The rock is abiotic and the fungus or lichen growing on it is biotic
  - Sunlight is an abiotic element
  - The water falling is abiotic, but the microorganisms in the water and the leaf are biotic
  - The insect and spider are both biotic, and the spider web is biotic too. A biotic element is one that relates to, or results from living things.
  - The herb garden has both abiotic components (soil, water, sun, and air) that are important as well as biotic organisms (like the herb plants). There are also biotic organisms tending the plants (humans), and probably eating them (rabbits, snails, and other garden pests).
3. **How do biotic and abiotic elements interact? Give three examples and describe the relationship.**
  - Answers will vary. Some examples are: Plants need the SUN to produce food, some seeds need the WIND to spread them far and wide, a lizard needs a ROCK to lie on to absorb the SUN's energy and view the area around it, animals need WATER to stay hydrated.
4. **What sort of abiotic resources can you see in the natural world around you?**
  - Answers will vary. Basically, anything that has never been alive can be included - sun , rocks, soil, water and air. Keep in mind, however, that healthy soil teems with mostly-helpful microbes!
5. **Animals and plants depend on each other. An organism that makes its own food (a plant, for example) is called a Producer because it "produces" food. An animal, such as a Deer, that eats what Producers make is called a Consumer. Some Consumers eat other Consumers (like a person who eats a Chicken!) Make a list of five Producers, five Consumers that eat Producers, and five Consumers that eat other Consumers.**
  - Answers will vary. Producers can include plants, fungi, lichen, moss, etc. Consumers that eat Producers can include animals that only eat plants (i.e. rabbits, mice, deer) or animals that eat plants and other animals (i.e. coyotes, raccoons, skunks). Consumers that eat Consumers can include predators (bobcat, mountain lion, shrew) or scavengers (turkey vulture).