



Cows, Cows, Cows

Video #320

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. **Emelie is a miniature Jersey cow. When she grows up, she will weigh about 700 pounds and give 2-4 gallons of milk a day. Larger, black and white Holstein cows give up to nine gallons of milk per day and weigh up to 1300 pounds. Why do you think Hidden Villa's farmer chose Jersey cows instead of Holsteins?**
 - Hidden Villa's farmers choose miniature Jersey cows because they are smaller and friendlier than the larger Holsteins cows, especially since Hidden Villa does not sell milk, so getting a whole lot of milk is not our goal. Smaller cows are easier to manage and less expensive to keep.
2. **Dairy products are things made from milk. How many can you name?**
 - Dairy Products include milk, cheese, yogurt, sour cream, cream cheese, ice cream, butter, and more.
3. **Cows are mammals. What makes an animal a mammal? When do mammals give milk?**
 - Mammals are warm blooded (Endothermic), have fur on at least part of their bodies, give birth to live young, and feed their babies milk. Mammals give milk when they have babies to feed. Farmers can milk a cow for a year after her baby is born.
4. **Cows like Emelie are dairy cows. They give us milk. Some cows are beef cows. They give us meat. Meat contains protein for building strong muscles. Do you eat meat? What kind? If you are a vegetarian, where do you get your protein?**
 - Answers vary by student.
5. **Emelie grew up on another farm and was moved in a trailer to her new home at Hidden Villa. Have you ever been the "new kid", in your neighborhood or in school? How did that feel?**
 - Answers vary by student.