

THINGS WE CAN LEARN FROM A COW AND A WORM

INTRODUCTION AND INFORMATION FOR THE TEACHER

This poster and the accompanying activities are designed to encourage students to emulate nature's models for conserving the earth's resources.

To the Teacher

Students can learn how to better conserve precious resources by identifying natural animal ability and behavior and applying the concepts to their own lives.

Cattle and earthworms were chosen for this lesson because nature provided them with unique capabilities that allow them to use resources efficiently. Earthworms, for example, are crucial to the decomposition process, because they help to return to the soil those nutrients necessary for new plant growth.

As ruminants, cattle turn grass and other forages—containing cellulose, which is inedible by humans and many other animals—into high-quality food for humans, making use of vast resources that would otherwise go unused for food production. They also efficiently utilize otherwise unusable by-products from human food processing and play a key role as “energy converters and nutrition reservoirs” in food systems around the world.

The *Things We Can Learn from a Cow and a Worm* poster highlights these two animals, and encourages students to think critically about the interaction between each animal and its environment. The classroom activities challenge students to consider good environmental stewardship in their daily lives. The following lesson plan encapsulates a series of short activities that may be presented as a single extended lesson or as a series of short lessons within a unit on the environment or ecosystems.

Objectives

- Students will examine natural models that support conservation of resources.
- Students will extend conservation practices to their own lives.

Introducing the Poster

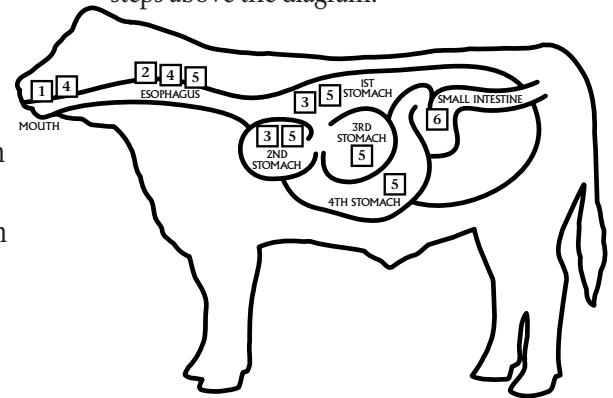
Engage students in a discussion through this riddle: What do cattle and earthworms have in common?
Answer: They are both models for conservation. Display the poster and help students discuss what cattle eat. Encourage them to use information from the poster as well as prior knowledge. Record their responses on the board.

USING ACTIVITY SHEET 1

Duplicate and distribute Activity Sheet 1. Allow students to work in pairs to process the information on this worksheet. Allow groups to report on their findings at the end of the lesson or the beginning of the next lesson.

Answers for Activity Sheet 1

Students should fill in the boxes with the appropriate numbers (1–6) that correspond with the numbered steps above the diagram.



Find Out

1. Sheep, oxen, llama, deer, goats, giraffes and camels are also ruminants—animals with split hooves and four stomach cavities.