

FOUR “STOMACHS”

Focus Lesson: Four Compartments of a Cow’s Stomach

Materials:

Cow by Jules Older
Milk From Cow to Carton by Alik
The Milk Makers by Gail Gibbons
 Poster paper
 Markers

Grade: 2

Time: 45 minutes

***Common Core Standards:**

CCSS.ELA-LITERACY.RI.2.7

Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

Thinking Skill: researching

Objective:

Students will be able to identify and understand that a cow has four compartments in its stomach that help it digest food. Each compartment plays a different role in the digestion of food. The essential nutrients from their digested food are absorbed into the cow’s bloodstream. Some of these nutrients enter the udder where they are then processed into milk.

Connection:

What does a stomach do?
 How many stomachs do you have?
 How many stomachs does a cow have?
 Does a cow’s stomach look the same as a human stomach?
 How many compartments or ‘sections’ do they have?

Explicit Instruction:

Ask the students what the job of a stomach is. Explain that they will be learning about the different jobs of a cow’s four stomach compartments.
 Read the seventh section of *Cow* by Jules Older.
 Show the diagrams of a cow’s stomach from *The Milk Makers* on pages 12-14 but do not read.

Guided Practice:

Split the students into eight groups (or four depending on the number of students, roughly 3-4 students per group). Have two groups in charge of “rumen”, two groups in charge of “reticulum,” two groups in charge of “omasum,” and two groups working on “abomasum”. Each group will create an illustrated poster on their topic. The poster should include a description of the job of the stomach they are assigned to and a diagram showing how it works.

Give students photocopies of page 11 in *Milk From Cow to Carton*, and of the seventh section of *Cow* and pages 12-14 in *The Milk Makers*. Give students time to read and discuss the pages in their small groups.

Independent Practice:

Have each group of students draw an illustration of what occurs in the stomach compartment that they are assigned to. Each “stomach” should include an accurately drawn and labelled illustration showing what happens as food is being digested and then ultimately travels through the bloodstream to the udder where it is changed into milk.

Reflection – Group Share:

Have each group share their poster. Have students share in the order of the stomach compartments (rumen, reticulum, omasum, abomasums).

Since there are 2 groups for each stomach compartment, the second group can add new or additional information after the first group presents.

Reading list:

Cow by Jules Older

Milk: From Cow to Carton by Alike

The Milk Makers by Gail Gibbons

Teacher Note: