

# Digestive Systems of Livestock: A Basic Look

**Media Type:** Video

**Duration:** 35 min.

## Description:

Explore the digestive systems of monogastric animals (e.g., horses, pigs and chickens) and ruminants (e.g., cattle, sheep, goats). Watch as a professor of animal science uses models, computer-generated graphics, laproscopic images taken within the system of a live animal and digestive tracks removed from slaughtered animals to teach about prehension, mastication, simple digestion and rumination. Viewers explore the entire digestive system of a pig, chicken and steer to identify organs and to understand the tissue structures and functions. The instructor dissects organs to expose contents and secretions aiding digestion.

## Horizontal Alignment

Core-Subject Area	Foundation Concept	Basic Understanding
Math	<i>Logical Skills</i>	<ul style="list-style-type: none"> <li>Probability and statistics</li> </ul>
Language Arts	<i>Application of Writing Skills</i>	<ul style="list-style-type: none"> <li>Vocabulary enhancement</li> </ul>
	<i>Analysis of Text and Information</i>	<ul style="list-style-type: none"> <li>Developing listening and comprehension skills</li> </ul>
Science	<i>Scientific Thinking and Investigating</i>	<ul style="list-style-type: none"> <li>Classification/organization skills</li> </ul>
	<i>Scientific Laws and Principles</i>	<ul style="list-style-type: none"> <li>Cycles, structures and processes</li> <li>Principles of anatomy and physiology</li> <li>Physical and chemical reactions</li> </ul>

# Digestive Systems of Livestock: A Basic Look

*Goal: To gain an understanding of the basic anatomy of the livestock digestive system*

## objectives

1. The student will understand methods of prehension.
2. The student will understand the different types of digestive systems.
3. The student will identify basic structures associated with digestive systems.

## lesson links

1. [Digestive Systems of Livestock Worksheet and Answer Key](#)
2. [Digestive Systems of Livestock Assessment and Answer Keys](#)
3. [Digestive Systems of Livestock Vocabulary Handout](#)
4. [Parts of a Digestive System Teacher Instruction Sheet](#)
5. [Digestive Systems of Livestock Crossword and Answer Key](#)

## lesson plans



**Class 1:** Show **Digestive Systems of Livestock: A Basic Look**. Students will complete the **Digestive Systems of Livestock Worksheet** during the presentation. Pause between each section and allow students to complete the appropriate **Digestive Systems of Livestock Assessment**—the presentation prompts you when to complete each quiz. However, do not give students the Final Quiz, this will be completed in a later class period. Distribute the **Digestive Systems of Livestock Vocabulary Handout**.



35 min.

**Class 2:** Using the **Parts of a Digestive System Teacher Instruction Sheet**, complete Part One of the project.

**Class 3:** Discuss the material covered in the presentation. Have students complete the **Digestive Systems of Livestock Crossword**. Discuss the answers to the quizzes as a class.

**Class 4:** Using the Teacher Instruction Sheet, complete Part Two of the project. Administer the **Digestive Systems of Livestock Final Assessment**.

## internet sources



- [www.aphis.usda.gov](http://www.aphis.usda.gov)

## project



### Parts of a Digestive System

#### Directions:

Each student will be handed a label of one part of a digestive system, either ruminant or mono-gastric. Then, students will be timed as they place themselves in the correct order in which the digestive system functions. This activity will be repeated during another class period and the times will be compared.



## Career Connections

Using the *Career Connections Activity*, allow students to explore the various careers associated with this lesson. See the *Activity* for more details. *If student licenses have been purchased:* Students will select the interviews to watch based on your directions. *If only a teacher license is purchased:* Show students all the career interviews and instruct them to only complete the interview form for the required number of interviews.

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