

External Anatomy of Livestock: Terms & Terminology

Lesson Overview

Media: Microsoft® PowerPoint® (45 slides)

Seat Time: 6 Classes | 300 minutes teaching

Goal:

To analyze the external anatomy of various livestock species.

Description:

This lesson takes an in depth look at parts of an animal to provide a foundational understanding of basic concepts. Detailed diagrams are used to identify the external anatomy of various livestock species. Anatomical terms of location are defined along with functionality of each.

Objectives:

1. To identify the external anatomy of livestock species.
2. To analyze the functions of the external anatomy of livestock species.
3. To compare the external anatomy of livestock species.

Lesson Plan

Class 1

Class Overview:

- *Anatomical Terms of Location* PowerPoint® Segment
- Action Plan
- Vocabulary Handout
- Key Concepts
- Skin Graft Activity

Essential Questions:

1. What does anatomical terms of location mean and what terms are included?

Step 1: Bell Ringer:



- Ask students the question, “what does anatomical terms of location mean” and have them write it down for future use.

Step 2: Distribute the **Action Plan**, **Vocabulary Handout** and **Key Concepts**.



- The **Action Plan** lays out a list of tasks for students to complete during the lesson.
- The **Vocabulary Handout** is a list of terms used throughout the lesson.
- The **Key Concepts** is an outline which identifies the main ideas presented in the lesson which students can fill in to aid in note taking during the lesson.

Step 3: Show the **Anatomical Terms of Location** PowerPoint® segment.



- This segment is nine slides long.
- Be sure students utilize the **Key Concepts** for this segment of the lesson.

Step 4: Students should complete the **Skin Graft Activity**.



- Students will use materials from around the classroom make a 3-D representation of the different layers of skin and display the models in the classroom.

Step 5: Exit Ticket:



- Students should turn in the **Skin Graft Activity**.



NOTE: If you see this icon, the item is available to be completed interactively on iCEV.

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Lesson Plan

Class 2

Class Overview:

- *External Components of Livestock PowerPoint®* Segment
- Action Plan
- Key Concepts
- Livestock Instructor Project

Essential Questions:

1. What is included in the external components of livestock?

Step 1: Bell Ringer:



- Lead a short class discussion about the importance of knowing the external anatomy of livestock.

Step 2: Show the *External Components of Livestock PowerPoint®* segment.



- This segment is 19 slides long.
- Be sure students utilize the **Key Concepts** for this segment of the lesson.

Step 3: Students should begin the **Livestock Instructor Project**.



- Students will create a presentation to teach their classmates about the external anatomy of an assigned animal.

Step 4: Exit Ticket:



- Students should write down why they think it is important to know the external anatomy of livestock, then turn it in before leaving class.

Class 3

Class Overview:

- *Livestock External Anatomy Diagrams PowerPoint®* Segment
- Action Plan
- Labeling a Bull Activity
- Labeling a Heifer Activity
- Labeling a Dairy Cow Activity
- Labeling a Boar Activity

Step 1: Bell Ringer:



- Students should discuss strategies to label the external anatomy of livestock.

Step 2: Show the *Livestock External Anatomy Diagrams PowerPoint®* segment.



- This segment is 12 slides long.
- Be sure students utilize the **Key Concepts** for this segment of the lesson.

Step 3: Students should complete the **Labeling a Bull Activity**.



- Students should practice locating the external anatomical features of a bull.

Step 4: Students should complete the **Labeling a Heifer Activity**.



- Students should practice locating the external anatomical features of a heifer.

Step 5: Students should complete the **Labeling a Dairy Cow Activity**.



- Students should practice locating the external anatomical features of a dairy cow.



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Lesson Plan

Class 3 (continued)

Step 6: Students should complete the **Labeling a Boar Activity**.



- Students should practice locating the external anatomical features of a boar.

Step 7: Exit Ticket:



- Students should turn in their activities.

Class 4

Class Overview:

- Action Plan
- Labeling a Gilt Activity
- Labeling a Ram Activity
- Labeling a Ewe Activity
- Labeling a Buck Activity
- Livestock Instructor Project

Step 1: Bell Ringer:



- Students should prepare to work on their **Livestock Instructor Project**.

Step 2: Students should complete the **Labeling a Gilt Activity**.



- Students should practice locating the external anatomical features of a gilt.

Step 3: Students should complete the **Labeling a Ram Activity**.



- Students should practice locating the external anatomical features of a ram.

Step 4: Students should complete the **Labeling a Ewe Activity**.



- Students should practice locating the external anatomical features of a ewe.

Step 5: Students should complete the **Labeling a Buck Activity**.



- Students should practice locating the external anatomical features of a buck.

Step 6: Students should continue working on the **Livestock Instructor Project**.



- Students will create a presentation to teach their classmates about the external anatomy of an assigned animal.

Step 7: Exit Ticket:



- Students should turn in their activities.



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Lesson Plan

Class 5

Class Overview:

- Action Plan
- Labeling a Doe Activity
- Labeling a Horse Activity
- Labeling a Chicken Activity
- Livestock Instructor Project

Step 1: Bell Ringer:



- Students should gather their materials to continue working on the **Livestock Instructor Project**.

Step 2: Students should complete the **Labeling a Doe Activity**.



- Students should practice locating the external anatomical features of a doe.

Step 3: Students should complete the **Labeling a Horse Activity**.



- Students should practice locating the external anatomical features of a horse.

Step 4: Students should complete the **Labeling a Chicken Activity**.



- Students should practice locating the external anatomical features of a chicken.

Step 5: Students should continue working on the **Livestock Instructor Project**.



- Students will create a presentation to teach their classmates about the external anatomy of an assigned animal.
- Students will share their presentations during the next class period.

Step 6: Exit Ticket:



- Students should turn in their activities.

Class 6

Class Overview:

- Action Plan
- Assessment
- Livestock Instructor Project

Step 1: Bell Ringer:



- Students should review for the **Assessment**.

Step 2: Administer the **External Anatomy of Livestock: Terms & Terminology Assessment**.



- The Assessment is a comprehensive assessment covering material throughout the entire lesson.

Step 3: Students will share their **Livestock Instructor Projects** with the class.



Step 4: Exit Ticket:



- Students should turn in their projects.



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Activities

For All Labeling Activities

Accommodations:

Allow students to review slides 32 through 43 of the presentation to help them label the images.

Modifications:

Allow students to take the activity home to complete and then turn in at the beginning of the next class period.

Extension:

Allow students to define each term which is labeled on the animal.

Labeling a Bull

Students will practice locating the external anatomical features of a bull.

Labeling a Heifer

Students will practice locating the external anatomical features of a heifer.

Labeling a Dairy Cow

Students will practice locating the external anatomical features of a dairy cow.

Labeling a Boar

Students will practice locating the external anatomical features of a boar.

Labeling a Gilt

Students will practice locating the external anatomical features of a gilt.

Labeling a Ram

Students will practice locating the external anatomical features of a ram.

Labeling a Ewe

Students will practice locating the external anatomical features of a ewe.

Labeling a Buck

Students will practice locating the external anatomical features of a buck.

Labeling a Doe

Students will practice locating the external anatomical features of a doe.

Labeling a Horse

Students will practice locating the external anatomical features of a horse.

Labeling a Chicken

Students will practice locating the external anatomical features of a chicken.



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Activities

Skin Graft

Students will work in a group or individually using materials in the classroom to create a 3-D representation of the different layers of skin which they will display in the classroom.

Accommodations:

Allow students to review slides 15 through 18 on the presentation to help them when creating their representation of the different layers of skin.

Modifications:

Allow students to create a drawing to represent the different layers of skin instead of creating a 3-D model.

Extension:

Allow students to create more than one 3-D model to display in the classroom.

Project

Livestock Instructor

Working in groups, students will create a presentation about the external anatomy of an assigned livestock animal they are assigned (beef cattle, dairy cattle, swine, sheep, goats, horses, chickens). Groups can utilize a tame animal or create a poster and/or presentation about the various anatomical parts of their assigned animal. Groups should share their work with the class.

Accommodations:

Allow students to create a single poster about the external anatomy of the animal they are assigned.

Modifications:

Allow students to write a paper over the external anatomy of the animal instead of creating a poster or presentation.

Extension:

Allow students to create several presentations over several different livestock species.

Career & Technical Student Organizations

FFA

- Livestock Evaluation
- Prepared Public Speaking
- Veterinary Science



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Career Connections

Career Connections

Using the **Career Connections Activity**, allows students to explore careers associated with this lesson by viewing career interviews with various industry professionals. The career interviews are located on the Select Playlist drop down menu on the lesson page. If Student Licenses are being utilized, students can select the interviews to watch based on your directions. If only a Teacher License is being utilized, show students all of the career interviews and instruct them to only complete the interview form for the required number of interviews. See the **Career Connections Activity** for more details.

- William Moss, Livestock Teacher, North Region Area, Georgia
- Todd Preszler, Senior Livestock Analyst, Bunge Limited
- Wendy Matteson, Agriculture Teacher, Ridgeland High School
- Frank Garry, D.V.M., Veterinarian, South Plains Veterinary Clinic

