



## Purpose

While you were taking care of a friend's horse, you noticed that the animal was limping. The local veterinarian tells you it is only a cut on the hock of the animal, and you need to keep the cut clean and give the horse a shot of antibiotics in the croup. Do you know where the hock and the croup are? Do all animals have a hock and croup?

Knowing the proper terminology for external animal anatomy is important for communication. Most parts on animals have similar names among species; however, there are names of some parts that are specific for a species of animal. Being able to identify and communicate using proper terminology is important for health care, management, and selection.

## Materials

### Per student:

- *Modern Livestock and Poultry Production* textbook
- Computer station with Internet access
- Pencil
- *Agriscience* Notebook

## Procedure

Review the diagrams from the textbook related to external animal parts. Complete the tables in *Activity 4.2.1 Student Worksheet*, identifying common parts among animal species and distinguishing parts that are species specific, such as the comb of a chicken.

1. Review the following pages from *Modern Livestock and Poultry Production* textbook to help you complete the tables:
  - Beef Cattle Anatomy – Page 258
  - Swine Anatomy – Page 385
  - Sheep Anatomy – Page 486
  - Horse Anatomy – Page 566
  - Chicken Anatomy – Page 648
  - Dairy Cattle Anatomy – Page 721
2. In Table 1 of *Activity 4.2.1 Student Worksheet*, identify the part on the diagram of the animal species found on the textbook pages listed above. Provide a brief description of where the part is located on the animal and what purpose it serves the animal.
3. Determine the purpose of the external part, using the Internet or animal reference textbooks for research.
4. Complete Table 2 of *Activity 4.2.1 Student Worksheet* by comparing animal diagrams found in the textbook and determine two parts that are unique to each species of animal listed in Table 2.
5. Provide information about the location of the part and the purpose it serves the animal.



## Conclusion

1. Explain how the hock and the knee of quadruped animals are similar.

they are both on their legs and help them move around better.

2. Explain how knowledge of external anatomy is helpful for animal production.

Knowing what the animals look like will help you choose which ones to breed for better production.

3. In some dairy cattle operations, the the tail of a cow is partially removed to prevent contamination of milk during the milking process. What is the purpose of the tail and how may removing the tail of a cow be detrimental?

The purpose of a tail is to keep flies and bugs off the the cows, it makes their everyday life easier.

4. List five external parts found on animals that are also found on humans.

- Ears
- Neck
- Nose
- eyes
- Hair

**Table 1. Common Parts Found on Animals**

External Part	Location	Purpose
Dew Claw	Wrist	grip and hold items
Fetlock	The back of the ankle	Helps legs bend, supports ankle
Flank	In Front of their back thigh, below the hip	Connects the thigh and barrel
Hock	In Front of their back knee	Helps legs bend
Hoof	Bottom of leg	Main support
Loin	Sides of backbone	hold back
Muzzle	Nose	Senses
Pastern	Above the hoof below the fetlock	Let's hoof bend
Poll	Between the ears	Connects head
Sheath	WEE WEE	to Urinate and breed
Tail	On their but	Get rid of flies

**Table 2. Species Specific Parts**

Species	Unique Part	Location	Purpose
Beef/Sheep	Dewlap	Between front legs/ lower neck	extra skin
	fore flank	behind front legs	connects the leg skin to belly skin
Chicken	comb	above their head	keeps the chicken cool in hot weather
	beak	mouth	helps the eat
Dairy Cow	Milk Wells	Under tummy	Let's milk veins pass through abdomen
	milk veins	tummy	helps milk move through the cow
Horse	One toe hoof	Hoof	Helps the move smoother
	Chestnuts	Inside of leg	Hard skin
Swine	Jowl	throat	no purpose
	snout	nose	helps breath and dig