Name: _____

CASE

Activity 5.1.1 Terms of Digestion

Purpose

The digestive system is a series of organs working together to produce energy for your body. The digestive systems of animals like pigs and dogs are similar to yours. The digestive systems of cows and sheep have specific organs allowing them to digest grass and other plants.

The two main digestive systems found in animals are ruminant and non-ruminant. Ruminant animals have a stomach that is divided into several parts and can digest roughages or high fiber feeds due to bacteria present in their digestive systems. Non-ruminant animals have varying systems and include monogastric, pseudo-ruminants, and avian systems. Monogastric systems have simple one compartment stomachs. Pseudo–ruminants have a one compartment stomach but the cecum is able to break down roughages and high fiber feeds similar to a ruminant system. Avian systems are have a muscular stomach and a glandular stomach along with other slight differences like no teeth and a crop to hold food. Most non-ruminants require diets that are high in energy and low in fiber. No matter what organs an animal has in its digestive system the end tasks are the same, to break down food into usable energy.

In order to understand how each system works, learn the terms and functions of the different digestive systems.

Materials

Per pair of students:

- Matching note card

Per student:

- Pencil
- *Agriscience Notebook*

Procedure

In this activity, you will work with a partner and other classmates to match digestive parts and functions.

Part One – Matching the Parts

1. Your teacher will give you and your partner a packet of terms and a packet of definitions.
2. Work together to match the term to the corresponding definition.
3. When you and your partner are done, raise your hand and show your teacher.
4. If you and your partner have incorrectly matched any of the terms, correct and show your teacher again.

Part Two – Finding the Definition

1. Your teacher will assign you a note card with a term or a definition. Each of your classmates will also receive a term or definition.
2. Find the person whose note card matches yours.
3. Once everyone has found their match, you and your new partner will read your term and definition aloud to the class.

Part Three – Processes Defined

Complete *Activity 5.1.1 Student Worksheet* by matching each term to its definition. You may use your classroom text, *Modern Livestock and Poultry Production* to assist you.

Conclusion

1. How is a monogastric digestive system different from a ruminant digestive system?

2. List one digestive organ found in poultry but not other digestive systems.

3. Describe the cecum.

Name: _____

Activity 5.1.1 Student Worksheet

Directions: Match each term below to its definition. Each definition will be used once.

1.	Crop	_____	A.	The sum of all chemical and physical processes
2.	Enzymes	_____	B.	Valve that prevents food in stomach from reentering esophagus
3.	Absorption	_____	C.	Sac-like enlargement of the esophagus in birds used to store food
4.	Mastication	_____	D.	Hair-like extensions of stomach lining that increase surface area
5.	Metabolism	_____	E.	The stomach and intestines, the digestive system
6	Villi	_____	F.	The method or way food is delivered to the mouth
7.	Bile	_____	G.	Partly digested feed
8.	Prehension	_____	H.	Formation and repair of body tissues
9.	Gizzard	_____	I.	Two blind pouches
10.	Cardia	_____	J.	The process of chewing food
11.	Alimentary canal	_____	K.	Muscular portion of bird stomach, grinds and crushes feed particles
12.	Anabolism	_____	L.	Organic catalysts that speed up digestion
13.	Chyme	_____	M.	Aids in digestion of fats and fatty acids
14.	Gastrointestinal tract	_____	N.	Passage in a body through which food passes from mouth to anus
15.	Ceca	_____	O.	Taking digested parts into the bloodstream