Ag Literacy Project: A Short History of Livestock Production
*by A. Wolters and C. Kohn*

Name: Hour Date:

Date Assignment is due: Why late? Score: + ✓ -
 Day of Week Date If your project was late, describe why

**Directions**: after reading *A Short History of Livestock Production* by J. Hartung, complete the questions below. You may work with a partner or in groups to find answers the questions but you are responsible for completing your own packet.

1. Summarize the main idea of the entire introduction section in four sentences using your own words.

1. The main idea for the first paragraph would best be described as…
	1. humans have only recently domesticated animals.
	2. domesticating animals is only a small part of the history of human’s evolutionary process.
	3. when humans began domesticating animals and plants, they changed a large part of their humanity.

	Cite specific evidence from the reading that supports this answer by writing the sentence(s) or portions of a sentence in the space below:
2. Based on the second paragraph, the reader could conclude that animals such as cattle and sheep have \_\_\_\_\_ ability to survive in the wild.
	1. gained the
	2. lost the
	3. maintained the same level of
3. Read the passage below and answer the questions that follow:  *”Taming and domestication is also the story of a successful* ***symbiosis*** *between animal and humans which presumably started simply by recognising advantages for both.”* Based on the context of that sentence, symbiosis most likely means:
	1. a mutually beneficial relationship
	2. Situation where one party rules over another
	3. Something that has meaning in itself, but also a deeper meaning
4. Which of the following sentences provides the best support for the author’s claim that animals and humans have a symbiotic relationship?
	1. The authors report that the brain of domesticated animals weighs less than that of their wild ancestors.
	2. Both animals and humans changed their living habits and the animals in particular their phenotype…
	3. the animal received regularly food and protection from humans, and humans benefited from easier access to the animal and its [resources].
5. Which of the following lines from the introduction most probably serves as the author’s thesis statement for the rest of the paper?
	1. The origin of livestock production dates back about 11,000 years ago when man started to domesticate sheep.
	2. With the domestication of animals and the cultivation of plants, a fundamental change in the development of humanity happened.
	3. During this continuing ‘co-operation’ over thousands of years; both animals and humans changed their living habits…
	4. This history of domesticated animals can be divided into several time periods or ‘ages’ of flowing development mostly influenced by humans introducing new technologies in feed production, security, breeding, and housing.
6. Briefly summarize why you chose the answer that you did for the previous question. *I chose*  *because….*

Justify your answer using evidence from this reading.
7. Write a 6 sentence summary of section 1.2. Use your own words, and be sure to summarize the main ideas of each paragraph.

1. Based on the this entire section, readers can assume that scientists make their judgments on the time frame of domestication of animals by
	1. bone findings
	2. remnants of ceramics
	3. drawings of husbandry practices
	4. all of the above
2. Briefly summarize why you chose the answer that you did for the previous question. *I chose*  *because….*

Justify your answer using evidence from this reading.
3. Based on the information in the fourth paragraph, farmers in Dutch coastal regions were most likely to farm which of the following?
	1. Sheep b. Pig c. Cattle d. Chicken

	*Why?*
4. Which of the following best summarizes the trends related to the development of farms and the number of animals housed on farms in central Europe from the first century BC to the third century AD?
	1. The number of farms remained consistent, but the animals on each farm increased.
	2. The number of farms increased, but the animals on each farm stayed consistent.
	3. The number of farms decreased, but the number of animals per farm increased.
	4. Both the number of farms and the animals per farm increased.
	5. Both the number of farms and the animals per farm decreased.
5. Justify your answer for the previous question by completing the table below for the River Weser settlements:

	1. 1st Century BC - Number of Farms Number of cattle
	2. 1st Century AD - Number of Farms Number of cattle
	3. 2nd Century AD - Number of Farms Number of cattle
	4. 3rd Century AD - Number of Farms Number of cattle

Read the following sentence and answer the question that follows: *“Columella recommended the* ***provision*** *of sand and ash for dust bathing in some part of these areas protected by a roof. He gave advice to farmers, urging them to provide* ***sufficient*** *space for animals like sheep, goat, mare and foal when kept indoors and protect them from cold in winter.*

1. Based on the context of the passage, **provision** most likely means:

 a. an item provided or supplied

 b. a condition or requirement in a legal document

 c. to set aside an amount for a known future need

1. Based on the context of the passage, **sufficient** most likely means:
 a. too much b. plenty of c. not enough
2. Compare and contrast the roles of farmers in the time of Columella compared to the roles of farmers today. Include the words “*provision*” and “*sufficient*” in your summary.

1. In the last two paragraphs, the author compares the design of livestock buildings to today’s buildings in order to

 a. illustrate how much the buildings have changed with the advent of technology

 b. depict the dangerous aspects of the buildings in ancient times

 c. illustrate the how many similarities are still found in today’s buildings

 d. explain the high rates of death among livestock

1. Write a 4 sentence summary of section 1.3. Use your own words, and be sure to summarize the main ideas of each paragraph.
2. The primary causes to changes in husbandry and management were

 a. increased population that called for more efficient farming

 b. increased illnesses within herds of animals that called for more careful management of animals

 c. changes in politics and technological advances in agriculture

1. Briefly summarize why you chose the answer that you did for the previous question. *I chose*  *because….*

Justify your answer using evidence from this reading.
2. In the second paragraph of 1.3, the author explains how Christianisation, the erection of feudal systems, and the development of towns and trade changed animal agriculture. Fill in the blanks below with a change that occurred during this time and its impact on animal agriculture. The first has been done for you as an example:

Change: 3-field rotation reduced fallow land from 50% to 33%.

Impact: The efficiency of food production was dramatically increased.

Change:

Impact:

Change:

Impact:

Change:

Impact:
3. The use of the word “fallow” in the second paragraph most likely means…
	1. Plowed b. Barren c. Untouched d. Unused
4. One of the precursors of modern veterinary medicine is described in the second paragraph. According to the author, what were two of the origins of the veterinary medicine based on this paragraph?
5. The main idea of the third paragraph can best be stated as…

 a. the rising population demanded more meat than previous populations

 b. people in the Middle Ages ate meat more often than people of previous years

 c. Fishing became less important than raising cattle

1. Given your answer above, who do you think would consume the most meat?
	1. Prehistoric Humans
	2. Humans in the 1st Century AD
	3. Modern Humans

	Why?
2. In the fifth paragraph, the author provides two reasons for the tradition of sending animals to slaughter in autumn. Summarize in your own words what those two reasons are:

 a. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 b. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. How did the popularity of meat at this time (especially pork) affect the development of veterinary medicine?
2. Write a 4 sentence summary of section 1.4. Use your own words, and be sure to summarize the main ideas of each paragraph.
3. The first paragraph’s main idea can best be restated as

a. the process of growing and the prices for grain/cereal farming hindered the development of animal farming.

b. animals were treated differently in summer than in winter.

c. farmers often tried to feed animals rather poor quality of food throughout the winter.

d. Livestock production in the Middle Ages did not change in the 17th century.

1. The cause of the beginning of the transformation of animal farming was primarily

a. the rise in prices for meat
b. an insect that wiped out most of the grains
c. the development of higher quality food for animals in winter
d. the introduction of crop rotation

1. In the second paragraph, the author provides a quote from Adam Smith. Paraphrase this quote in your own words on the lines below.
2. Using your own words, rephrase the five advantages of switching from grazing to intensive (non-grazing) animal systems as described by Albrecht Thayer.
3. If crop rotation hadn’t gained in popularity among farmers in the Middle Ages, how do you think animal agriculture would be different today?

Why?
4. How might the disagreements of grazing advocates like Walz and Settegast with pro-intensive production advocates have impacted the rise of scientific agricultural research in the late 1800s in Europe and America?
5. Write a 4 sentence summary of section 1.5. Use your own words, and be sure to summarize the main ideas of each paragraph.
6. The first paragraph identifies which of the following cause and effect relationships?

a. Cause: increasing population; Effect: increasing demand for food

b. Cause: increasing demand for food; Effect: increasing population

c. Cause: increasing population and demand for food; Effect: development of methods to increase plant and animal production

d. Cause: development of methods to increase plant and animal production; Effect: increasing population and demand for food.

1. The author includes an example of changes (like Erxleben’s) in livestock farming methods in order to do what?

a. illustrate how similar the methods developed in the 19th century are to what we use today.
b. portray the many aspects of farming that began to change in the 19th century.
c. explain the way scientists used what they knew about animals and nature to increase their efficiency on farms.
d. depict the beginning of veterinary medicine.

*“He recognized that in over stocked animal houses the air is polluted with high concentration of* ***noxious*** *gases generated by animals and the manure.”*

1. Using the context of the sentence, noxious most probably means:

a. harmful b. smelly c. foggy d. unfortunate

1. How did the rinderpest outbreak in the 18th century impact the way we handle animal plagues today? Choose two answers.

 a. we learned not to kill of a whole herd of cattle

 b. we still follow similar procedures

 c. we no longer allow the government to make decisions about farming

 d. we value veterinary medicine

1. Which of the following is NOT a factor in the development of livestock production?

a. growth in the economy

b. intensive husbandry methods

c. increase in milk production

d. eradication of common cattle diseases

1. Which of the following most accurately summarizes the trends seen in today’s production?

a. the numbers of farms have increased, while the number of animals on a farm have decreased

b. the numbers of animals have decreased, while their productivity has increased

c. the numbers of farms have decreased, while the numbers of animals have increased

1. In the spaces below, summarize how each of the following factors contributed to the modern animal agriculture industry during the 1800s and 1900s.

Scientific Advancement:

Disease:

Economic Advancements:

War:
2. Write a 4 sentence summary of section 1.6. Use your own words, and be sure to summarize the main ideas of each paragraph.
3. The development of animal production in recent decades can be characterized by…

 and .
4. If a farm, like Tyson farms, is best known for raising one type of animal—Tyson Chicken, for example—in order to slaughter and sell at high volume, that farm is using… a. intensification b. specialization
5. What is the most important criteria in regards to defining intensification?
6. What is the most important criteria in regards to defining specialization?
7. *As an example, in the year 1900 an average German household had to spend about % of its income on food, but currently food expenditure has been reduced to %*
8. “*Another characteristic of this intensive animal production is that ever fewer persons are employed in this sector.*” According to the author, is this a good thing or a bad thing for animal agriculture?

This is a thing because
9. Summarize how will each of the following considerations of animal agriculture need to be addressed in order to meet the rising demands of consumers, according to the views of this author:

Animal Welfare:

Sustainability:

Antibiotic Use:
10. Do you agree with the author on these topics? Draft a response summarizing your position on these issues:
11. “*To reconcile the ‘split’ between livestock producers and the society is an important task for agriculture professionals currently*.” For the average animal agriculturalist, what does this mean?
12. Read Section 1.7. In the space below, record three pieces of information that you did not have in any of your section summaries earlier in this document. Record this information in your own words.

1.

2.

3.