

# Ag in the Classroom | Going Local

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## Horses – Third Grade

## **Purpose**

Students will gain information from the text, *Horses* written by Gail Gibbons to learn and define equine vocabulary, practice change over time, and compare and contrast a horses anatomy with human anatomy through informational and historical text.

### Subject Area(s)

English Language Arts, Science, Math, and Social Studies

## **Common Core/Essential Standards**

#### **ELA**

- **R1.3.7** Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).
- **RI.3.9** Compare and contrast the most important points and key details presented in two texts on the same topic.

#### Science

- **3.L.1** Understand human body systems and how they are essential for life: protection, movement and support.
- 3.L.1.1 Compare the different functions of the skeletal and muscular systems.
   Math
- **3.MD.B.4** Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.

#### **Social Studies**

- **3.H.2.1** Explain change over time through historical narratives. (Events, people and places)
- 3.G.1.4 Explain how the movement of goods, people and ideas impact the community

## **Agricultural Literacy Outcomes**

## Plants and Animals for Food, Fiber & Energy

Provide examples of specific ways farmers care for animals.







## **Essential Questions**

- 1. What characteristics define the type of horse?
- 2. Decribe different types of horses?
- 3. Explain how humans and horses are alike?
- 4. What are horses used for?
- 5. How do farmers care for horses?

#### Vocabulary

**Stallion:** a male horse of breeding age. **Mare**: a female horse of breeding age.

**Herd**: a group of large animals that live together.

**Domesticate**: to tame an animal. **Ponies**: the smallest in size of horses.

**Draft horses**: the biggest type of horses in size.

**Purebred**: the horse has a mother and father from the same breed.

**Crossbre**d: has at least one parent that is not a purebred.

Hands: measurement of horses' height.

Withers: the highest point of a horse's shoulder.

**Farrier**: a craftsman who trims and shoes horses' hooves.

**Gaits**: the way a horse moves its legs and places its hoves on the ground to move forward.

**Foal**: a baby horse.

**Weanling**: a foal that stops drinking milk from its mother (mare).

**Hands**: a unit of measure equal to 4 inches (about 10.16 centimeters) and used especially to measure the height of horses from the ground to the highest point of its withers.

**Withers**: the ridge between the shoulder bones of a horse.

**Halves**: one of two equal or nearly equal parts into which something can be divided.

**Fourths**: one of four equal parts of something.

**Yards**: a unit of measurement equal to 3 feet (0.9144 meters) or 36 inches.

**Feet:** a unit of measurement equal to  $\frac{1}{3}$  yard (0.3048 meter) or 12 inches.

**Inches**: unit of measurement equal to  $\frac{1}{36}$  yard or  $\frac{1}{12}$  of a foot (2.54 centimeters).

**Meter**: the basic metric unit of length equal to about 39.37 inches.

**Millimeters**: a length equal to 1/1000 meter.

#### **Student Motivator**

Print the KWL chart provided in the **Essential Files**. This should be kept on chart paper so that it can be used and posted throughout the entire lesson. Ask the students the following questions and place their answers in the first two columns. The third column will be filled in at the conclusion of **Activity One**.

- 1. What I Know.
  - a. What do you know about horses?
  - b. Have you ever seen or ridden a horse?
  - c. What color of horse is your favorite?
  - d. What is the difference between a pony and a horse?
- 2. What I Want to Know.
  - a. What do you want to learn about horses?
  - b. What jobs are horses used for on the farm?
  - c. What jobs are horses used for in the city?
  - d. What body parts of humans are similar to the same body part of a horse?

Share the article found <a href="http://www.sciencekids.co.nz/sciencefacts/animals/horse.html">http://www.sciencekids.co.nz/sciencefacts/animals/horse.html</a>
about fun facts regarding horses. Compare facts with the information placed in the first two columns.

Next, read the book, *Horses* written by Gail Gibbons and point out the vocabulary and answers to the questions listed above. Tell the students they will be learning about horses and how their body parts compare to theirs.

## **Background Knowledge**

Most children at a young age have been fascinated by horses. Considered as a beautiful animal, horses are an excellent example to use when comparing mammal-like characteristics to humans. There are similarties in the body structure between horses and humans. An informative article to read before teaching this lesson about the horse antomy compared to a human can be found at <a href="http://eclectic-horseman.com/comparable-parts-you-are-more-like-your-horse-than-you-think/">http://eclectic-horseman.com/comparable-parts-you-are-more-like-your-horse-than-you-think/</a>

The author, Gail Gibbons does an excellent job in defining equine vocabulary and expository text in her non-fiction book titled, *Horses*. Students will learn the history of horses, the difference in horses, the types of horses, and the work that horses are capable of performing. Students will be able to identify the purpose of raising horses and their existence on farms.

In the western states, horses are used on ranches to rope and brand cattle, and to carry cowboys through rough country to round up the herds. Horses are also used by police in larger cities such as Chicago to patrol busy areas that become clogged with traffic or in New York to protect people's well-being in large parks. People can also ride horses for pleasure on trails. Horses are specially trained for sports like polo, horse racing, fox-hunting, dressage, and rodeos.

Horses are important to agriculture; not for milk, meat, or wool, like other farm animals. Instead, farmers and ranchers breed, raise, and buy and sell horses similar to other livestock such as cattle, pigs, and sheep. Horses are also used on cattle farms for moving cows to different pastures or bringing them to the working chute for vaccinations.

#### **Materials**

- Yard stick
- meter stick
- paper
- Scissors
- Tape
- Illinois Horses AgMag
- Horses by Gail Gibbons
- Color Folders
- Notecards, markers, and construction paper for lap books

#### **Procedures**

## **Activity 1**

- 1. Assign the students into groups of 3-4 per group. Give each group a copy of the Illinois Ag in the Classroom Ag Mag on Horses.
- 2. As they are placed together in groups assign one of the following pieces of information to each group for reading: equine vocabulary, horse colors, types of horses, the use for horses, and how to take care of a horse.
- 3. Once they have read the texts and found their assigned information, student groups can report the information to their classmates found in the Ag Mag.
- 4. Groups will then use the information to create a lap book while using a colored folder about Horses. Please refer to this <u>video</u> for directions on creating a lap book.
- 5. Have each group present their lap books to their classmates and share out their design and information recorded in each book.
- 6. For more sharing, rotate the lap books from group to group allowing each group time to read the information in the lap book created by their classmates.
- 7. Ask each group to report one thing they learned from reading their classmates lap book and these statements can be added to the third column of the *KWL chart* found in the **Essential Files**.

## **Activity 2**

- 1. Have students read the article, Compatible parts You are more like a horse than You Think about the similarities and differences between horses and humans.
- 2. When studying the human body, students can compare and contrast their body with the body of a horse. Once they have read the article have the students use the T-chart found in the **Essential Files** and place similarities on the left side and differences on the right side of the chart.
- 3. Students then can label the parts of the skeletal system of the human and the horse. The following website has several <u>templates</u> to use for labeling the parts of the skeletal system.

#### **Activity 3**

- 1. Begin the lesson by asking students, what jobs do horses perform on and off the farm?
- 2. On the board or whiteboard display the *T-chart* titled Horse History found in the **Essential Files**. Record students answers under the heading "Now."
- 3. Once all answers have been recorded tell students they will be researching jobs horses performed in the past ("Then") by reading three different passages. Instruct the students to look for jobs horses performed in the past from the three passages, *Horses Lend a Helping Hand, Engines and Horses Mean Power, and Hard-working Horses* found in the Illinois Ag in the Classroom Ag Mag.
- 4. Inform the students that they will read the passages and look for jobs horses performed in the past.
- 5. Divide the class into 6 small groups and tell the students to record the jobs they found from the three passages.
- 6. Once each group has finished reading the three passages and recorded the jobs, have them share out their responses.

#### **Activity 4**

- 1. Introduce students to the method of measuring horses' height by way of hands.
- 2. Discuss how they are measured by "hands." A hand is a unit of measurement approximately 4 inches in height.
- 3. Have students form pairs.
- 4. One student will stand up against a wall in the classroom and have the second student use a piece of masking tape to measure the height of his/her partner.

- 5. Write the name of the student on the masking tape for identification. Switch and measure the first student in the group using masking tape and write their name on the tape as well. Leave the masking tape on the wall.
- 6. Next, have the students measure the tape with a yard stick in inches and with a meter stick using centimeters. Have students discuss the similarities and differences between inches and centimeters.
- 7. Students will record the measurements in their math jornal or notebook paper. Next, have students trace their hand on a piece of paper and cut out their tracing to use as an indirect measuring tool.
- 8. The student pairs will measure their masking tape used in step #4 with their cut out hand.
- 9. The students will compare all three measurements; inches, centimeters and hands.
- 10. As a class the students can compare and contrast their data by creating a line plot. This can be done as a class.

## **Suggested Companion Resources**

- Farming (Book/Booklet)
- Farm Pop-ups (Map/Chart/Graphic)
- http://www.scholastic.com/parents/resources/book-list/animals/horse-books-children(Book)

#### **Essential Files**

- T-Chart: Horse and Human Skeletal Charateristics
- *T-Chart: Horse History*
- Human & Horse Skeletal Comparison Chart

#### **Essential Links**

- https://www.youtube.com/watch?v=zFVJ2OBMICM
- http://www.agintheclassroom.org/teacherresources/AgMags/Horse%20Ag%20Mag.pdf
- http://eclectic-horseman.com/comparable-parts-you-are-more-like-your-horse-than-youthink/
- https://www.pinterest.com/angland0439/horse-worksheets/
- http://www.sciencekids.co.nz/sciencefacts/animals/horse.html
- http://www.thehorse.com/articles/22103/comparing-humans-and-horses
- http://www.elfwood.com/tutorials/category/Art

## **Ag Facts**

- North Carolina supports more than 306,000 head of equine, valued at nearly \$1.9 billion.
- Light horse breeds make up the largest single group of North Carolina's equine inventory (73 percent) with warmbloods second.
- The average animal was valued at \$7,266. The American Saddlebreds had the highest average value at \$28,927.
- Forty percent of the state's equine are kept for recreation and trail riding,
- 17 percent are show animals; and 10 percent are used primarily for breeding. Only 7 percent are used for work and 3 percent for racing.

#### **Extension Activities**

Find a horse trainer or barn owner in your local area and ask them to come talk to your students about the basic care for horses.

Students may be interested in studying an artist such as: Benozzo Gozzoli, Leonardo da Vinci, Albrecht Dürer and Raphael, they have depicted horses in their artwork. Susie Jessup's <u>website</u> offers great anatomical instruction for drawing horses.

#### **Sources & Credits**

- http://www.ncagr.gov/markets/livestock/horse/documents/equinestudy050809.pdf
- http://www.sciencekids.co.nz/sciencefacts/animals/horse.html
- https://www.curriculumassociates.com/educator-resources/write/Graphic Org/ceGrades3-5.htm