

Ag Adventure Lesson Plan

Subject Area: Collegiate Horseman's Association	Grade Level: 3
Learning Center: Hands High	
Objectives:	
~Students will be able to define a hand. ~Students will be able to explain the difference between a horse, pony, and miniature horse.	
Standards:	
<u>Mathematics: 4.2</u> Linear and area measurement are fundamentally different and require different units of measurement.	
Materials Needed:	Personnel Needed:
-Poster of feet/inches vs. hands -Picture posters of: Horse, Pony, and Miniature Horse -Cut-outs of 4" hands	-3 volunteers
Lesson Plan	
Instructor:	Students:
<p>Part 1:History of Hands -Ask students if they know what unit of measurement horses are measured with. Call on one or two students. -Explain history of "hands" why standardized measurement was important.</p> <p>Part 2: Horse Sizes -Ask students if they know what the 3 different sizes of horses are. -List sizes of horse, pony, and miniature horse using 'hands'. -Explain uses for each size of horse and give examples.</p> <p>Part 3: Are you a horse, pony, or miniature horse? -Help students measure their height to determine what size of horse they would be.</p>	<p>-Raise hands.</p> <p>-Listen quietly.</p> <p>-Listen quietly.</p> <p>-Participate in activity.</p>
Assessments:	
Ask students: What are the three different size types of horses? What unit is used to measure horses?	
Sources:	
<p>"Hand (measurement)." <i>Encyclopedia Britannica Online</i>. Encyclopedia Britannica, n.d. Web. 10 Sept. 2012. <http://www.britannica.com/EBchecked/topic/254079/hand>.</p> <p>"History of the American Miniature Horse." <i>The Miniature Horse.com: History of the American Miniature Horse</i>. N.p., n.d. Web. 09 Sept. 2012. <http://www.theminaturehorse.com/historyminiatures.htm>.</p> <p>"Mining Techniques and Equipment: Pit Ponies." <i>Miners' Museum - THE HISTORY OF MINING</i>. Cape Breton Miner's Museum, n.d. Web. 10 Sept. 2012. <http://www.minersmuseum.com/hof_haulage_1.htm>.</p> <p>Wright, Bob, Dr. "The "Hand" Measurement for Horses." <i>The "Hand" Measurement for Horses</i>. Ontario Ministry of Agriculture, Food, and Rural Affairs, Dec. 2001. Web. 10 Sept. 2012. <http://www.omafra.gov.on.ca/english/livestock/horses/facts/info_hands.htm>.</p>	

Hands High Script

Part 1: “Hands” a Unit of Measurement

Volunteer: Today we are going to talk about how we measure horses.

Volunteer: Does anyone know what unit of measurement we use to tell how tall horses are? *Wait for students to raise hands. Call on one or two students.*

Volunteer: Horses are measured in “hands.”

How many inches do you think a hand is? *Hold up sample “hand”*

A “hand” is approximately 4 inches. Horses are measured at the top of their withers (where the head meets the back). *Point to where withers are on horse poster.*

Volunteer: Why do you think we measure horses in “hands” instead of feet? *Wait for students to raise hands.*

Thousands of years ago, there weren’t many rulers or yardsticks. People used what they had available to them to measure objects. So the easiest option was their hands, feet, and forearms.

Volunteer: Can you imagine how confusing that would be?

For example my hand is bigger than your hand – so my horse would be less ‘hands’ and your horse would measure to be more ‘hands’ even if they were actually the same size because it would take more of your hands to reach the withers.

Volunteer: Because this was so confusing, the ‘hand’ was first standardized as a unit of measurement that equaled four fingers wide in ancient Egypt around 3000 BC. King Henry XIII of England officially decided that the hand would be 4 inches, which is what we use today.

Part 2: Horse Sizes

Volunteer: There are three different sizes of horses. Does anyone know what they are called?

Wait for students to raise hands. Pick a few to answer question.

Volunteer: That’s right! The three sizes are a horse, a pony, and a miniature horse.

A horse is taller than 14.2 hands high. *Point to the stick at 14.2 hands.* Anything taller than this is a horse.

A pony has to be 14.2 hands or shorter. *Point to the stick below 14.2 hands.* Anything shorter than this is a pony. Ponies often are stouter, with thick manes, shorter legs, and have wider barrels.

A miniature horse is only 8 to 9 hands high (34 inches). *Point to stick at 9 hands.* Some miniature horses can live up to 25-35 years old!

Volunteer:

Why do you think the sizes of a horse matters? Do you think that a big draft horse would be a good racehorse? Could a small miniature pony pull a plow? *Wait for the students to answer 'no.'*

Horses are used for agricultural purposes like plowing and herding animals, transportation, entertainment like racing and showing, and even therapy. They were also used for war in the past.

Most **ponies** were originally bred as mine ponies. Mine ponies had to be small yet sturdy in order to pull carts in the small tunnels. Ponies are also used for driving (pulling small carts) and some breeds can be ridden.

Miniature horses originated from the small mining ponies. They have been used for novelty animals, research, pets, showing, and even royal gifts.

Are there any questions?

Part 3: Are you a horse, pony, or miniature horse?

Volunteer: Now we are going to find out if you are a horse or a pony and how many hands you are.

Have students line up in a line to measure themselves against the "hands high" demonstration to see if they are a horse, pony, or miniature horse according to the 'hand' unit measurements.

Fact Sheet **Hands High**

Hand (measurement): Ancient unit of length, now standardized at 4 inches (10.16 cm) and used today primarily for measuring the height of horses from the ground to the withers (top of the shoulders). The unit was originally defined as the breadth of the palm including the thumb. A statute of King Henry XIII of England established the hand at four inches. (Encyclopedia Britannica)

- The rules of trade demanded the same measurement everywhere, and the 'hand' was eventually standardized by the Egyptians around 3,000 BC based upon a complex system including the "cubit." Because of the enormous influence of the Egyptian culture, use of this system migrated to other countries and cultures.

The uses of horses, ponies, and miniature horses:

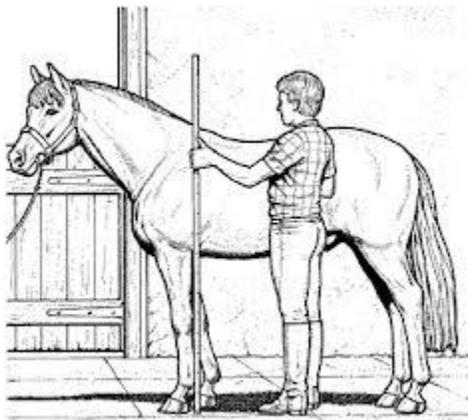
Horses: used for agricultural purposes – plowing, herding, packing; transportation; entertainment – racing, showing, gaming; therapy; and as war horses in historical times.

Ponies: bred for small, stocky frame used in mining tunnels – called “pit ponies.” Ponies are also used for driving, packing, and some breeds can be ridden.

Pit pony qualifications:

- Low set, heavily bodied and heavily limbed with plenty of bone and substance to deal with harsh conditions, heavy carts, and low roofs and steep grades
- Sure footed
- Even temperament
- Between 5 and 14 years old

Miniature horses: originated from the small mining ponies. They have been used for novelty animals, research, pets, showing, and even royal gifts.



Proper location to measure a horse.

Fact Sheet Hands High

References:

"Hand (measurement)." *Encyclopedia Britannica Online*. Encyclopedia Britannica, n.d. Web. 10 Sept. 2012. <<http://www.britannica.com/EBchecked/topic/254079/hand>>.

"History of the American Miniature Horse." *The Miniature Horse.com: History of the American Miniature Horse*. N.p., n.d. Web. 09 Sept. 2012. <<http://www.theminaturehorse.com/historyminiatures.htm>>.

"Mining Techniques and Equipment: Pit Ponies." *Miners' Museum - THE HISTORY OF MINING*. Cape Breton Miner's Museum, n.d. Web. 10 Sept. 2012. <http://www.minersmuseum.com/hof_haulage_1.htm>.

Wright, Bob, Dr. "The "Hand" Measurement for Horses." *The "Hand" Measurement for Horses*. Ontario Ministry of Agriculture, Food, and Rural Affairs, Dec. 2001. Web. 10 Sept. 2012. <http://www.omafra.gov.on.ca/english/livestock/horses/facts/info_hands.htm>.m/historyminiatures.htm>.

Ag Adventure Lesson Plan

Subject Area: Collegiate Horseman's Association	Grade Level: 3
Learning Center: Live Horses	
Objectives:	
~Students will be able to identify the size, color, and breed of specific horses. ~Students will be able to identify the historical dependence of "Horse Power."	
Standards:	
Social Studies: <u>1.2</u> People in the past influence the development and interaction of different communities of regions.	
Materials Needed:	Personnel Needed:
-Live Horses	-2 Volunteers
Lesson Plan	
Instructor:	Students:
<p>Part 1: History of Horsepower -Ask students what they think horsepower is? -Explain history of horsepower and why it was used.</p> <p>Part 2: Breeds and Colors -Ask students if they know any horse breeds? -Tell students about draft horses, mustangs, quarter horses and thoroughbreds and their uses. -Ask students if they can name a color of horses? -Explain the different horse colors and tell students the color of the live horses.</p> <p>Part 3: Live Horses -Assist in directing students with live horses.</p>	<p>-Listen quietly and raise hands to answer questions when asked.</p> <p>-Listen quietly and raise hands to answer questions</p> <p>-Follow directions and pet horses.</p>
Assessments:	
What is horsepower? Why is horsepower significant?	
Sources:	
<p><i>Breed Characteristics</i>. AQHA, n.d. Web. 13 Sept. 2012. <http://aqha.com/About/ContentPages/TheAmerican-Quarter-Horse/Breed-Characteristics.aspx>.</p> <p>"Breeds of Livestock - Horse Breeds." <i>Breeds of Livestock - Horse Breeds</i>. Oklahoma State University, 22 Feb. 1995. Web. 09 Sept. 2012. <http://www.ansi.okstate.edu/breeds/horses/>.</p> <p>"Explanation and History of Horsepower." WOW Horses, 2009. Web. 09 Sept. 2012. <http://www.wowhorses.com/explanation-and-history-of-horsepower.html>.</p>	

"Horses in History Bibliography, Introduction: Animal Welfare Information Center." *Horses in History Bibliography, Introduction: Animal Welfare Information Center*. United States Department of Agriculture, 30 May 2012. Web. 10 Sept. 2012.

Live Horses Script

Part 1: History of Horsepower

Volunteer: At this station we will talk about types of horses and terms use for technology that have come from horses.

Volunteer: Have you heard of horsepower? *Wait for students to raise hands.*

Volunteer: Before machines were invented, horses were used as work animals. The term “horse power” was used to calculate how much a steam engine could pull.

If it would take normally, take 15 horses to do the work, then that steam engine had 15 horsepower. Now horsepower (hp) is used for most measurements of power for electrical and mechanical engines.

Part 2: Breeds and Colors

Volunteer: Can anyone tell me a horse breed? *Wait for students to raise hands.*

Volunteer: There are many different breeds of horses. Each breed is used for specific purposes.

Belgian draft horses originally came from Belgium. They are huge, strong, farm horses. Draft horses are used for their power and strength. Clydesdales, Percherons and shires are other draft breeds.

Thoroughbreds are known for their ability to run very fast for long distances and are used today in horse racing as well as other types of riding.

Quarter Horses are heavily muscled horses commonly used for rodeo, racing or ranch work. They got their name from their ability to run extremely fast quarter miles.

A mustang is feral, or untamed, horse. These horses are now found in the western United States. The breed originated from escaped Spanish horses in the 17th century. They come in all different colors.

Volunteer: Horses can come in many colors including: black, bay, brown, chestnut, dun, grulla, sorrel, palomino, gray or roan. The horse you see here is _____.

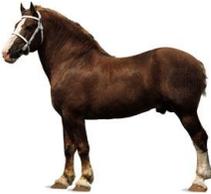
Part 3: Live Horse Interaction

Students will be able to pet live horses with handler’s instruction and ask questions about the live horses if time permits.

Fact Sheet Live Horses

Horse Power

- James Watt, the man accredited with inventing the steam engine first coined the term “horse power” in the late 1700’s.
- Most of Watt’s clients used horses, so he needed to compare his engine with something familiar – how many horses it would take to do the work his engine could.
- If it took 15 horses to do the work required, than the horsepower of that steam engine would be 15hp.
- Because of Watt’s success with the steam engine, “horsepower” became a standard unit of measurement for the power of engines.

Common Horse Breeds	
	<p>Appaloosa</p> <p>Recognized by its spots and splashes of colors. Appaloosa’s were a very popular breed for Native American Tribes, particularly the Nez Peirce.</p>
	<p>Arabian</p> <p>Developed by the Bedouin tribes of the Arabian Desert. Arabians were bred to withstand long treks across the deserts. Characteristics include a dished face and a teacup muzzle. Arabians come in grey, chestnut, bay and roan and an occasional solid black.</p>
	<p>Belgian</p> <p>A draft horse that originated from Belgium, as huge, strong, farm horses. Other draft breeds include Clydesdale, Percheron and Shire.</p>
	<p>Friesian</p> <p>From the province of Friesland in the Netherlands. Bred for lighter weight, Friesians are always black with a white star and have very long manes and tails.</p>
	<p>Mustang</p> <p>A feral horse (was once domesticated but now lives in a wild state) that is found in the western United States. Originated from escaped Spanish horses in the 17th century. Come in a variety of all colors.</p>
	<p>Paint</p> <p>Originated from Spanish bloodlines escaped in the Americas. Two distinct types of paint horses: Tabiano and Overo. Tabiano-are distinguished by head markings, generally four white legs, and their spots are relatively regular about their bodies.</p>

Live Horses

	<p>Overo- will be either mostly white or mostly dark, and the dark will not cross the withers. One or all four legs will be dark, and the head will have bold white markings or a bald face.</p>
	<p style="text-align: center;">Quarter Horse</p> <p>The name comes from the ability of these horses to reach great speeds for a quarter mile. Quarter horses are heavily muscled. They are excellent for moving cows do to their ease to hand and train, and their temperament. They are used in rodeo and still race quarter miles. They come in a wide variety of colors.</p>
	<p style="text-align: center;">Thoroughbred</p> <p>A breed that can carry weight and run at high speeds for long distances. Many are breed for horse racing on tracks. Detailed records are kept to track the lineage of these horses.</p>

Horse Colors

- | | |
|----------|----------|
| Black | Grulla |
| Bay | Sorrel |
| Brown | Palomino |
| Chestnut | Gray |
| Dun | Roan |

References:

Breed Characteristics. AQHA, n.d. Web. 13 Sept. 2012. <<http://aqha.com/About/ContentPages/TheAmerican-Quarter-Horse/Breed-Characteristics.aspx>>.

"Breeds of Livestock - Horse Breeds." *Breeds of Livestock - Horse Breeds*. Oklahoma State University, 22 Feb. 1995. Web. 09 Sept. 2012. <<http://www.ansi.okstate.edu/breeds/horses/>>.

"Explanation and History of Horsepower." WOW Horses, 2009. Web. 09 Sept. 2012. <<http://www.wowhorses.com/explanation-and-history-of-horsepower.html>>.

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Ag Adventure Lesson Plan

Subject Area: Collegiate Horseman's Association	Grade Level: 3
Learning Center: Pony Express	
Objectives:	
~Students will be able to explain the importance of the Pony Express. ~Students will be able to estimate long distances using landmarks.	
Standards:	
Social Studies: 1.2 People in the past influence the development and interaction of different communities of regions. Social Studies: 2.1 Use various types of geographic tools to develop spatial thinking	
Materials Needed:	Personnel Needed:
-Stick horses -Envelope ("important message" that is carried) -Tape -Map of U.S. showing Pony Express Routes	-4 Volunteers
Lesson Plan	
Instructor:	Students:
Part 1: History of the Pony Express -Role-play pony express employer. -Ask students to raise hands if they know what the Pony Express is. Call on one or two students. -Tell students the history of the pony express. -Explain the distance riders traveled. Part 2: Relay Activity -Tell students they get to be Pony Express Riders for the day. -Explain directions for the relay game and help organize the students quickly.	-Students will listen quietly and answer questions when asked. -Students will listen quietly as game directions are given. -Students will actively participate in relay game.
Assessments:	
Ask students: What was the Pony Express used for and why was it important? Why were their Pony Express Stations every 10 miles?	
Sources:	
"Pony Express History." <i>Pony Express History</i> . The Pony Express National Museum, 2012. Web. 09 Sept. 2012. < http://ponyexpress.org/history/ >.	
"Horses in History Bibliography, Introduction: Animal Welfare Information Center." <i>Horses in History Bibliography, Introduction: Animal Welfare Information Center</i> . United States Department of Agriculture, 30 May 2012. Web. 10 Sept. 2012. < http://www.nal.usda.gov/awic/pubs/HorseHistory/intro.shtml >.	

Pony Express Script

Part 1: Pony Express History

Volunteer: Welcome pony express riders! The year is 1860 and we are in need of some fast horse riders to carry a very important message over the Rocky Mountains to California.

Volunteer: The pony express was developed in 1860 and ran until 1861, as a way to send mail across the country. Combining the telegraph with the Pony Express, mail could be sent from New York to California in just 10 days. Though that seems like a long time today, 150 years ago that was the fastest time on record.

Volunteer: The Pony Express set up stations every 10 miles. Ten miles was the distance that a horse could run at a full speed before it got tired. Ten miles is a long distance, we can see _____ which is about ten miles from here. A Pony Express rider would get to a station and switch horses every ten miles so that the mail would be traveling at full speed constantly.

Part 2: Relay Activity

Volunteer: Today we are going to figure out which of you are cut out to be pony express riders. I have a very important message that needs to be delivered.

Volunteer: Your job is to ride to the pony express outpost. Once you get there, you will hand off your message, switch horses and riders who will then ride back to the pony express station. We will do this until everyone has ridden. The fastest team will be chosen to take our message to California.

Fact Sheet Pony Express

The Pony express was founded by William H. Russell, William B. Waddell, and Alexander Majors in response to the need for faster communication with the west in the threat of Civil War.

-consisted of relays of men on horseback across a 2,000-mile trail from St. Joseph, Missouri to Sacramento, California

-officially opened on April 3rd, 1860

-the westbound trip was made in 9 days and 23 hours

-the eastbound trip was made in 11 days and 12 hours

-the riders made 250-mile days

-over 100 stations each at least 10 miles apart for maxim out-put of strength and speed from the horses

-the pony express eventually employed 80 riders, and between 300 to 400 horses

-the express route was very dangerous, but only one mail delivery was ever lost

-never financially successful even in light of the Civil War, the pony express lasted 19 months, until October 24, 1861

-the pony express added to the romantic idealism of the American west and the culture



References:

"Pony Express History." *Pony Express History*. The Pony Express National Museum, 2012. Web. 09 Sept. 2012. <<http://ponyexpress.org/history/>>.

"Horses in History Bibliography, Introduction: Animal Welfare Information Center." *Horses in History Bibliography, Introduction: Animal Welfare Information Center*. United States Department of Agriculture, 30 May 2012. Web. 10 Sept. 2012. <<http://www.nal.usda.gov/awic/pubs/HorseHistory/intro.shtml>>.