



# The Book Planter



## Ag in the Classroom

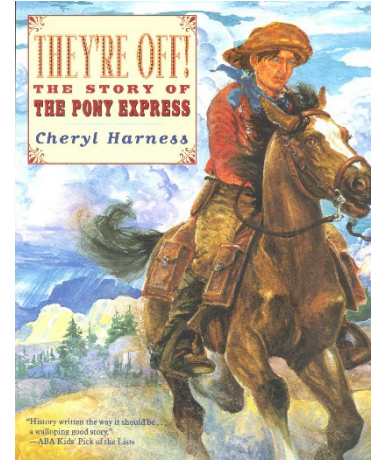
Post Office Box 27766 | Raleigh, NC 27611 | (919) 782-1705  
ncagintheclassroom.com

May 2021

### *They're Off! The Story of the Pony Express*

Written by: Cheryl Harness

*Eeeeeowooooeeeee!* In 1860 with the North and South about to be divorced in war, East and West were united through an extraordinary venture—the Pony Express! Over the course of ten days, 80 riders and five hundred horses delivered mail between California and Missouri—a mission that took three weeks by stagecoach. Although it existed only a year and a half, the Pony Express remains a legendary chapter in American history and a symbol of the bold, adventurous character of the Old West. The spirit of the brave riders and their ponies is captured perfectly in this lively, brightly illustrated, and information-filled account.<sup>1</sup>



### Fun Facts

- Throughout history, horses were used for agriculture, work, and war, but today they are mainly used for leisure, sport, and therapy.
- In agriculture, draft horses pulled plows and other farming equipment until the late 1800s when the tractor was invented.
- Horsepower is a measurement of work. It was created by James Watt who lived from 1736 until 1819. Watt wanted to measure the amount of energy required to raise coal out of a coal mine, so he created "horsepower" as the unit of measure. How much is one horsepower? One horsepower is equivalent to 33,000 foot-pounds of work performed in one minute, which can be achieved in many different combinations of feet and pounds. One horsepower equals all of the following:
  - Lifting 33,000 pounds up 1 foot in 1 minute
  - Lifting 1 pound up 33,000 feet in 1 minute
  - Lifting 1,000 pounds up 33 feet in 1 minute
  - Lifting 1,000 pounds up 330 feet in 10 minutes
  - Lifting 100 pounds up 33 feet in 6 seconds<sup>2</sup>
- Since speed was the main goal of the Pony Express, there was a weight limit for the riders. Most were small, wiry men who weighed between 100 and 125 pounds—roughly the same size as a modern horse-racing jockey.<sup>2</sup>
- Ordinary people almost never used the Pony Express because the price of the service was so high. In the early days, a half-ounce of mail cost \$5, the equivalent of \$130 today. The service was mainly used to deliver newspaper

reports, government dispatches, and business documents, most of which were printed on thin tissue paper to keep costs down.<sup>2</sup>

### **Background Agricultural Connections<sup>2</sup>**

Horses played an important role in the settlement and expansion of the American West. These hardy animals were the primary mode of transportation. Horses and mules were also used extensively on farms, in mines, and forests, and later in building railroads and roads that were eventually used by trains and automobiles. The term **horsepower** is a reminder of a horse's ability to perform hard work day after day in a variety of conditions.

The **Pony Express** depended on fast horses and was an important piece of the history of the American West. The Pony Express was a mail delivery service founded, owned, and operated by the freighting firm of William H. Russell, Alexander Majors, and William B. Waddell. It was very different from how we receive mail today. Beginning in 1860, young men on horseback carried letters from Missouri to California as fast as they could ride. Riding in the Pony Express across the western United States was very dangerous for the horses and the riders. Many of the men who rode in the Express were orphans or didn't have parents to worry about their safety. The Pony Express trail went through eight present-day states (some of the states had not yet entered the Union at the time of the Pony Express)—Missouri, Kansas, Nebraska, Colorado, Wyoming, Utah, Nevada, and California. Before the **telegraph**, this mail relay system was the most direct and practical means of east-west communication.

Between 400-500 horses were used by the Pony Express for mail delivery. Horses were selected for swiftness and endurance. On the eastern end of the Pony Express route, the horses were usually selected from US Cavalry units and included Morgans and Thoroughbreds. In the west, mustangs were used to navigate the harsh terrain. During the 80-100 mile route, a Pony Express rider would change horses 8 to 10 times. The horses were ridden quickly between stations at a fast trot or canter, around 10 to 15 miles per hour. Sometimes, the horses were galloped at speeds up to 25 miles per hour. The Pony Express had 190 stations. At each relay station, tired horses were exchanged for a fresh horse. Each station had a corral and barn. A keeper and stablehand were responsible for having a rested horse saddled and ready when a rider arrived. Home stations housed the riders between trips.

The Pony Express generally provided excellent service, covering the 1,966-mile one-way distance in 10 days or less. It was the quickest form of mail delivery at that time, but it was very expensive—nearly \$5 to send a letter. At its peak, the service employed 80 riders and 400 horses. In October 1861, the Pacific Telegraph line, joining Carson City, Nevada to St. Joseph, Missouri, was completed, and messages could be relayed almost instantaneously. The Pony Express became obsolete overnight. In the short life of the Pony Express, only 18 months, 37,753 letters and documents were delivered and only one mail pouch was lost.

### **Interest Approach – Engagement<sup>2</sup>**

1. Explain to the students that the period between 1829 and 1870, when settlers moved to the American West, is known as westward expansion.
2. Ask the class to consider what animals they think were most useful to settlers.
3. Show [The Cowboy Horse video](#).
4. Discuss the importance of horses to the settlement of the West. Include the following points in the discussion:

- a. Horses were used as a main mode of transportation.
  - b. Horses performed farm duties, such as pulling plows and gathering cattle.
  - c. Horses were used to pull wagons.
5. Explain to the students that they will be learning about another important service horses provided during westward expansion—the Pony Express.

### Activity 1: Mapping the Pony Express<sup>2</sup>

1. Show [The Pony Express](#) video.
2. Ask the students to consider the unique challenges of riding a horse as a Pony Express rider. (*lack of water, extreme temperatures, American Indian encounters, steep mountain ranges, lack of populated areas, dangerous wildlife, exhaustion*)
3. Explain to the students that they are going to use a satellite imagery map to determine the topography of the Pony Express stations and explore what it may have been like to pass through these areas. Each student will need access to a computer (students can be paired if technology is limited), or the map can be projected and completed as a class activity.
4. Provide each student or group a link to the [Pony Express Station Map](#). Explain to the students that this map shows the locations of 170 stations. At each relay station, a tired horse was exchanged for a fresh horse. Each station had a corral and barn. A keeper and stablehand were responsible for having a rested horse saddled and ready when a rider arrived. Home stations housed the riders between trips.
5. Explain that the Pony Express trail went through eight present-day states (some of the states had not yet entered the Union at the time of the Pony Express)—Missouri, Kansas, Nebraska, Colorado, Wyoming, Utah, Nevada, and California. Missouri (1821) and California (1850) had already entered the Union. Kansas (1861) entered while the Pony Express was active, and Nevada (1864), Nebraska (1867), Colorado (1876), Wyoming (1890), and Utah (1896) entered the Union after the Pony Express ceased service.
6. Have the students choose two stations, click on the pins and read the information, and identify any landmarks, streams, roads, forests, mountains, or other indicating features of the landscape (be sure to click on "Park Tiles Imagery" in the top right corner for satellite imagery).
7. Emphasize that the climate varies greatly along the Pony Express trail. Climates can be affected by latitude, elevation, and distance from the ocean. In general, the climates along the Pony Express trail can be grouped as steppe, desert, and mountain. The steppe climate is temperate with warm to hot summers and cool to very cold winters and favors the growth of grasses and shrubs. Deserts are defined by very low levels of precipitation. Mountain climates receive relatively high levels of precipitation and have very cold winters and cool summers.
8. Have the students complete the [Pony Express Station Activity Sheet](#) for their chosen locations.
9. As a class, discuss some of the possible challenges horses, riders, and station keepers may have had at the different station locations.

## Activity 2: The Pony Express Horses<sup>2</sup>

1. Organize the class into small groups. Provide each group with a [Pony Express Horse Breed Card](#).
2. Have each group watch one of the following videos and take notes about the characteristics of their assigned horse breed.
  1. [Unusual Heroes: American Mustang](#)
  2. [Meet the Morgan](#)
  3. [Thoroughbred Horse Characteristics](#)
3. Have the groups share some of the characteristics they noted with the class. Discuss reasons why these horse breeds might have been selected for the Pony Express.

## Activity 3: Addressing a Letter<sup>2</sup>

1. Ask the students if they have ever received a letter in the mail. Show the students a piece of mail that has been postmarked. Ask them to identify the elements of the postmark (i.e., the stamp, address, city, state, ZIP code, postmark date, and location). Have the students identify how long it took for the mail to be sent from one location to the next. Tell them that generally mail can be received within a couple of days, or even overnight if a person is willing to pay an additional fee.
2. Have the students identify other forms of communication that are widely used today (e.g., email, telephone, text messaging, social media). Discuss how we communicate today and the advantages and disadvantages of each method. Emphasize the role of penmanship, spelling, and composition in conveying an effective message.
3. Instruct students on how to address an envelope and send a letter. Students should then write a letter to a friend or relative that describes, in their own words, the adventures and experiences of a Pony Express rider. Have the students mail their letters from the school to their homes. Students may want to predict how many days it will take for their letters to be delivered.

## Links

- The Cowboy Horse (video from **Interest Approach**)  
[https://www.youtube.com/embed/mC27CmH\\_3is](https://www.youtube.com/embed/mC27CmH_3is)
- The Pony Express (video from **Activity 1**)  
<https://www.youtube.com/embed/7hjXUmCeppU>
- Pony Express Station Map (link from **Activity 1**)  
<https://www.nps.gov/maps/embed.html?mapId=bdd418d2-3fb2-45bb-83f4-076e760fb3ba>
- Pony Express Station Activity Sheet

[https://cdn.agclassroom.org/media/uploads/2020/09/12/Pony\\_Express\\_Stations.pdf](https://cdn.agclassroom.org/media/uploads/2020/09/12/Pony_Express_Stations.pdf)

- Pony Express Horse Breeds Cards (**Activity 2**)  
[https://cdn.agclassroom.org/media/uploads/2020/09/12/Pony\\_Express\\_Horse\\_Breeds\\_.pdf](https://cdn.agclassroom.org/media/uploads/2020/09/12/Pony_Express_Horse_Breeds_.pdf)
- Unusual Heroes: American Mustang (video from **Activity 2**)  
<https://www.youtube.com/embed/3YC1AuwoW0Y>
- Meet the Morgan (video from **Activity 2**)  
<https://www.youtube.com/embed/oDgbnLIzyD0>
- Thoroughbred Horse Characteristics (video from **Activity 2**)  
<https://www.youtube.com/embed/eweOYqITuJ8>

#### Sources

1. <https://www.simonandschuster.com/books/Theyre-Off!/Cheryl-Harness/9780689851216>
2. <https://www.agclassroom.org/matrix/lesson/778/>

#### K-5 Subject Areas

Reading, Writing, Speaking and Listening, Science, and Social Studies

#### NC Standard Course of Study

##### Reading

- **RL.K.1** With prompting and support, ask and answer questions about key details in a text.
- **RL.K.2** With prompting and support, retell familiar stories, including key details.
- **RL.K.3** With prompting and support, identify characters, settings, and major events in a story.
- **RI.K.1** With prompting and support, ask and answer questions about key details in a text.
- **RI.K.2** With prompting and support, identify the main topic and retell key details of a text.
- **RI.K.3** With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.
- **RL.1.1** Ask and answer questions about key details in a text.
- **RL.1.2** Retell stories, including key details, and demonstrate understanding of their central message or lesson.
- **RL.1.3** Describe characters, settings, and major events in a story, using key details.
- **RI.1.1** Ask and answer questions about key details in a text.
- **RI.1.2** Identify the main topic and retell key details of a text.
- **RI.1.3** Describe the connection between two individuals, events, ideas, or pieces of information in a text.
- **RL.2.1** Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
- **RL.2.2** Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.
- **RL.2.3** Describe how characters in a story respond to major events and challenges.
- **RI.2.1** Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
- **RI.2.3** Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.
- **RL.3.1** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- **RL.3.3** Describe characters in a story and explain how their actions contribute to the sequence of events.
- **RI.3.1** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- **RI.3.2** Determine the main idea of a text; recount the key details and explain how they support the main idea.
- **RL.4.1** Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

- **RL.4.3** Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text.
- **RI.4.1** Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- **RI.4.3** Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.
- **RL.5.1** Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- **RL.5.3** Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text.
- **RI.5.1** Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- **RI.5.3** Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

### Writing

- **W.K.5** Participate in shared investigation of grade appropriate topics and writing projects.
- **W.K.6** With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question
- **W.1.6** With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
- **W.2.6** Recall information from experiences or gather information from provided sources to answer a question.
- **W.3.6** Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.
- **W.4.5** Conduct short research projects that build knowledge through investigation of different aspects of a topic
- **W.5.5** Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.

### Speaking and Listening

- **SL.K.1** Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
- **SL.K.3** Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
- **SL.K.4** Speak audibly and express thoughts, feelings, and ideas clearly.
- **SL.1.1** Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
- **SL.1.4** Produce complete sentences to describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.
- **SL.2.1** Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.
- **SL.2.4** Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent and complete sentences.
- **SL.3.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly
- **SL.3.4** Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly in complete sentences at an understandable pace.
- **SL.4.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.
- **SL.4.4** Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; adjust speech as appropriate to formal and informal discourse.
- **SL.5.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly



- **SL.5.4** Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; adapt speech to a variety of contexts and tasks.

#### **Science**

- **K.E.1** Understand change and observable patterns of weather that occur from day to day and throughout the year.
- **K.L.1** Compare characteristics of animals that make them alike and different from other animals and nonliving things.
- **1.L.1** Understand characteristics of various environments and behaviors of humans that enable plants and animals to survive.
- **1.L.2** Summarize the needs of living organisms for energy and growth.
- **2.E.1** Understand patterns of weather and factors that affect weather.
- **2.L.2** Remember that organisms differ from or are similar to their parents based on the characteristics of the organism.
- **4.L.1** Understand the effects of environmental changes, adaptations and behaviors that enable animals (including humans) to survive in changing habitats.
- **5.E.1** Understand weather patterns and phenomena, making connections to the weather in a particular place and time.

#### **Social Studies**

- **K.G.1** Use geographic representations and terms to describe surroundings.
- **K.G.2** Understand the interaction between humans and the environment.
- **1.H.1** Understand that history tells a story of how people and events changed society over time.
- **1.G.1** Use geographic representations, terms and technologies to process information from a spatial perspective.
- **2.H.1** Understand how various sources provide information about the past.
- **2.G.1** Use geographic representations, terms and technology to process information from a spatial perspective.
- **3.H.1** Understand how events, individuals and ideas have influenced the history of local and regional communities.
- **3.H.2** Use historical thinking skills to understand the context of events, people and places.
- **5.G.1** Understand how human activity has and continues to shape the United States.
- **5.C.1** Understand how increased diversity resulted from migration, settlement patterns and economic development in the United States.

# Mustang

The mustang is a breed of classic wild horses of the Old West. They are descended from the horses brought to the Americas by Spanish explorers in the 16th century. Derived from the Spanish word “mustengo,” their name means “ownerless beast” or “stray horse.” Mustangs are known for their stamina, speed, and ability to make long journeys.



**Behavioral Characteristics:** Wild, spirited, stubborn, highly energetic, intelligent, brave

**Height:** 14-15 hands (56-60 inches, 142-152 cm)

**Weight:** Up to 1,000 pounds

**Lifespan:** Up to 40 years

**Average Speed:** 35 mph

**Top Speed:** 55 mph

**Popular Traits:** Beautiful, very strong, intelligent, minimum maintenance



# Morgan

The Morgan horse is a breed of domesticated American horses known as the earliest horse breed developed in the United States. All Morgans trace back to a single sire, a stallion named Figure, who was born in Massachusetts in 1789. Used as cavalry mounts in the American Civil War, they are valued for their good looks and versatility.



**Behavioral Characteristics:** Versatile, brave, adaptable, eager, friendly

**Height:** 14-15 hands (56-60 inches, 142-152 cm)

**Weight:** 900-1,000 pounds

**Lifespan:** Around 30 years

**Average Speed:** 6-8 mph

**Top Speed:** 20 mph

**Popular Traits:** Multi-talented, easily trained, intelligent, adaptable to humans, easy to keep



# Thoroughbred

The Thoroughbred horse is a breed best known for horse racing. Originating in Great Britain, they are valued for their ability to carry weight with sustained speed over extended distances. Thoroughbreds were first imported to the American colonies in 1730. The term thoroughbred is sometimes incorrectly used to mean purebred, but refers to a specific breed.



**Behavioral Characteristics:** Noble, brave, willing, lively, adaptable, friendly

**Height:** 15-17 hands (60-68 inches, 152-173 cm)

**Weight:** Around 1,000 pounds

**Lifespan:** 25 years

**Average Speed:** 37.5 mph

**Top Speed:** 44 mph

**Popular Traits:** Beautiful, strong, durable, friendly, obedient

Name \_\_\_\_\_ Date \_\_\_\_\_

### Pony Express Stations

1. What is the name of the Pony Express station? \_\_\_\_\_  
\_\_\_\_\_

2. In what present-day state is the station located? \_\_\_\_\_

3. Was the station a relay station or a home station? \_\_\_\_\_

4. What did you learn about the station from your notes? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Describe the basic topography of the station (desert, steppe, mountain). \_\_\_\_\_  
\_\_\_\_\_

6. Identify any landmarks, streams, forests, mountains, or other indicating features of the landscape. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. What are some of the possible challenges riders or station keepers may have had at this location? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_