

# A Handy Measure

## Objective

Students learn how early horse traders estimated a horse's size and practice measuring with standard units of measure and benchmarks.

## Background

A deafening gun blast sent excited settlers on horseback racing to stake their claims during the Oklahoma Land Run on April 22, 1889. A hundred or more years before that, Kiowa, Comanche, Cheyenne and Pawnee hunters rode horses into Oklahoma, following the bison herds. Oklahoma could not have been settled without horses. People had to ride long distances just to find water.

Horses helped settle our state, and they are still important to Oklahomans today. Only California and Texas have more horses than Oklahoma. In fact, there are 325,000 horses in the state, one for every ten Oklahomans.

Early horse traders found it was easier to use their hands to measure horses than to carry around measuring sticks. They would count hand-widths from the ground to the horse's withers. The withers is the high part of the horse's back, between the shoulder blades. A man's hand is generally about four inches wide. A horse is generally about 14.2 hands, 14 hands and two inches, or taller. Anything shorter than that is considered a pony.

## Vocabulary

**height**—the highest part or point

**horse**—a large hooved grazing domestic mammal that is used to carry or draw loads and for riding

**measure**—to find out the size, extent, or amount of

**width**—the measurement of the short or shorter side of something

## Materials

- yard sticks
- meter sticks
- colored paper
- tape

## Procedures

1. Discuss length and width.
  - Measure 14 hand widths and two inches from the floor.
  - Place a piece of masking tape on the chalkboard or the wall to mark that height.
  - Explain to students that the tape represents the usual height of a horse.
2. Divide students into pairs to measure each other's heights.
  - One student will stand with his or her back to the wall.

## Oklahoma Academic Standards

### PRE-KINDERGARTEN

Measurement: 2.2

### KINDERGARTEN

Measurement: 2.1

### GRADE 1

Measurement: 2.1,2,3

### GRADE 2

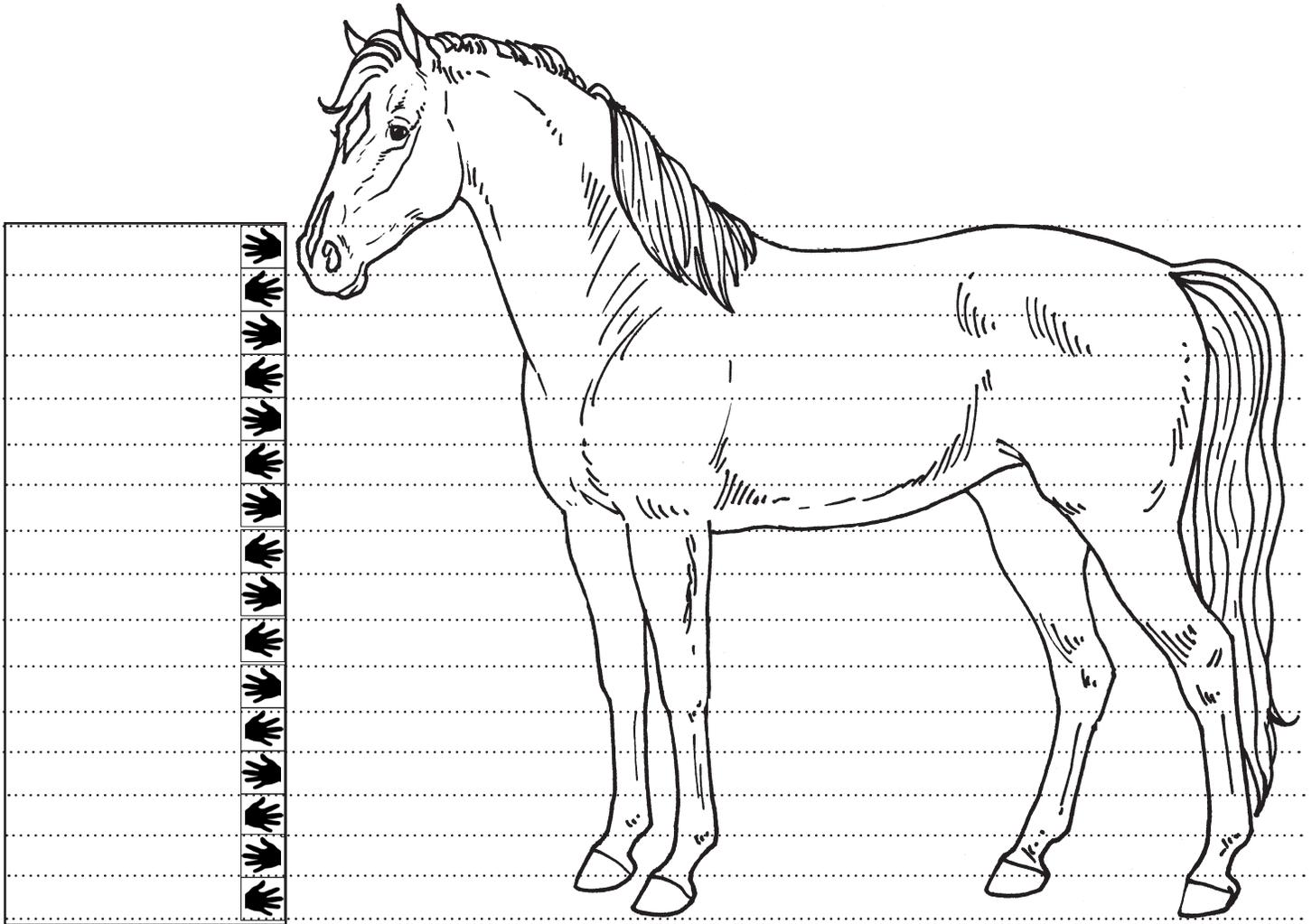
Measurement: 2.1,2

- The other student will mark the first student's height with a piece of masking tape.
  - Students will write their names on the masking tape marking each one's height.
3. Students will measure their heights, first using a yardstick or meter stick and then using their hands. Students will write both measurements on the tape and in the appropriate space on the student worksheet.
  4. Each student will trace both of his or her hands on one sheet of paper and measure the widths. How do the widths of most students' hands compare with the average 4-inch width of an adult man's hand?
  5. On colored paper, run about five copies of each student's pair of hands, enough for about ten hands per student. Students will cut out the hands and tape them to the wall, from the floor to the tape, marking their heights.
  6. Students will complete the worksheet provided with this lesson.
  7. Use the wall in the hallway or school library to measure students' heights, and display the hand measurements for other classes to see.
  8. Students will use their feet to measure the perimeter of the classroom. Graph the measurements on the chalkboard.
  9. Students will brainstorm common objects they might use for measuring.

Name \_\_\_\_\_

# A Handy Measure

Horses are measured by the hand, from the ground to the withers. The withers is the high part of the horse's back, between the shoulder blades. The average width of a man's hand is four inches. A horse must be 14.2 hands tall to be called a horse. Anything shorter is a pony.



1. Count the hands in the picture above. The animal in the picture is \_\_\_\_\_ hands tall. Is it a horse or a pony? \_\_\_\_\_
2. Stand with your back to the wall and get your partner to place tape on the wall just above your head. Use a yardstick or meter stick to measure from the floor to the tape. How tall are you? \_\_\_\_\_.
3. Draw a picture of yourself in the space below, at left. Use the hands to draw yourself at the correct height.
4. On another sheet of paper, trace your hand. Use a ruler to measure the widest part of your hand below your fingers. How wide is your hand? \_\_\_\_\_
5. Use your hands to measure. How many hands tall are you? \_\_\_\_\_ hands