



Alternative Method of Instruction
Middle School – 6th Grade
Day 3 – The Kentucky Derby

Name: _____

Name: _____

Speed and the Kentucky Derby



The Kentucky Derby is a famous horse race that takes place annually in Louisville, Kentucky, on the first Saturday of May. It is often referred to as the "most exciting two minutes in sports" and is the first leg of the Triple Crown, which also includes the Preakness Stakes and the Belmont Stakes. The race is open to three-year-old Thoroughbred horses and is run over a distance of 1 and 1/4 miles.

In horse racing, speed is crucial to determining the winner of the race. The faster a horse can run, the more likely it is to win. The Kentucky Derby is a race that tests the speed and stamina of the horses, as they must run a relatively long distance at a fast pace. A horse's speed is determined by calculating the distance it has covered in a certain amount of time. This is done using the formula for speed, which is **speed = distance / time**. To calculate the speed of a horse in the Kentucky Derby, the distance it has run is measured in furlongs (1 furlong = 1/8 mile), and the time it has taken to run the distance is recorded in seconds. By dividing the distance by the time, the speed of the horse in furlongs per second can be calculated. This calculation helps to determine the horse's overall speed and can give an indication of its chances of winning the race.

Graphing:

Some times of different horses to complete the Kentucky are listed below. Create a bar graph using this information.

The effect of the horse racing on time of race completion.

Name of Horse	Time to Finish (in minutes)
Authentic	23
Tiz the Law	19
Mr. Big News	22
Honor A.P.	21
Ny Traffic	24

Remember good graphs have a title, labels with units, appropriate scale and spacing, are neat and accurate to the data. Be sure to include all of these components on your graph. Show your math for your calculations.

To calculate group spacing (x)

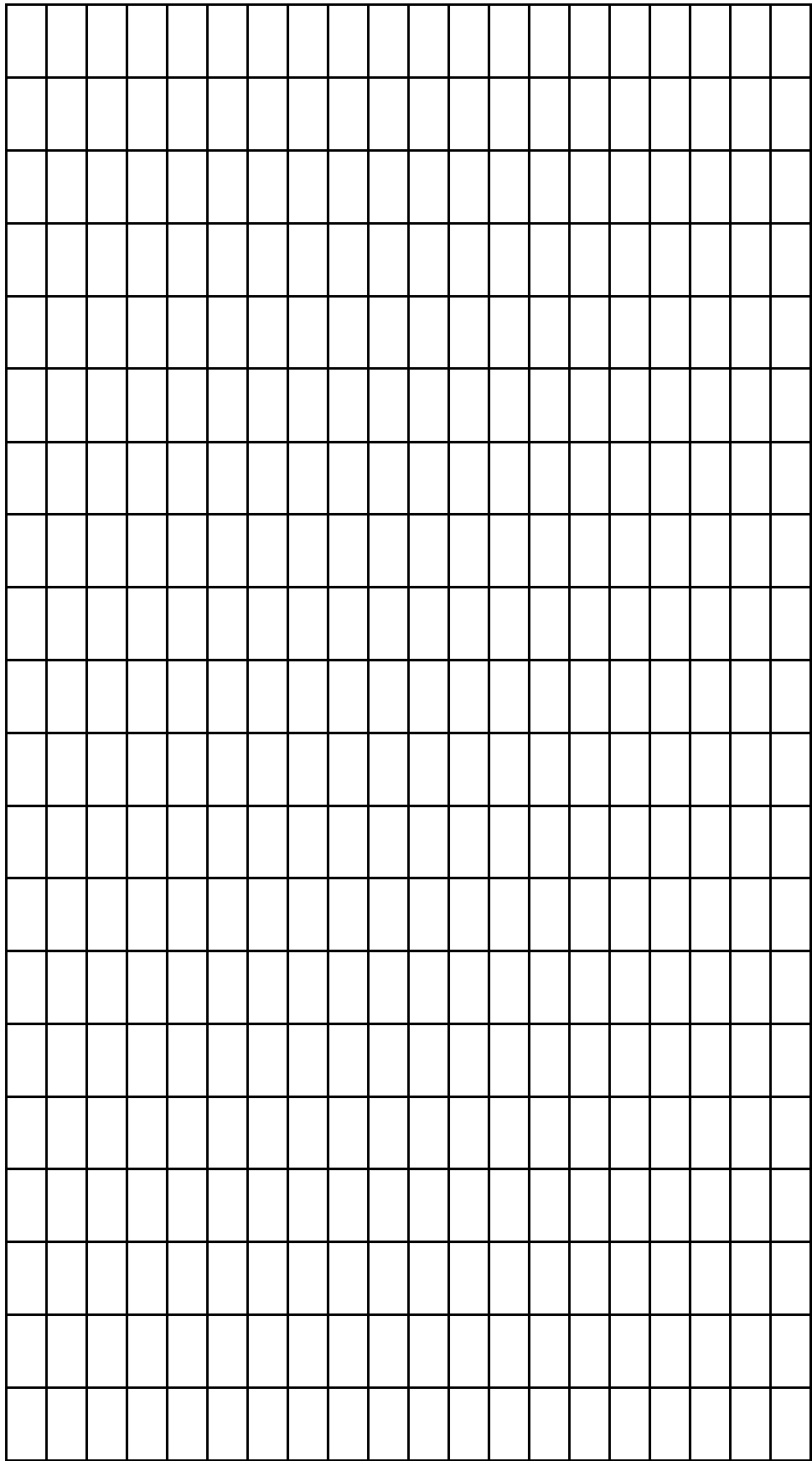
Number of boxes / # of groups (number of usable boxes on X divided by number of groups)

Show your math for the x axis = $\frac{\# \text{boxes}}{\# \text{of groups}}$ Does this need to be rounded? ____
If yes to what? _____

To calculate number scale (y)

Highest value / number of boxes used = scale (highest value in your average set divided by number of boxes on y axis)

Show your math for the y axis = $\frac{\text{Range}}{\# \text{of boxes}}$ Does this need to be rounded? ____
If yes to what? _____



Graph analysis:

1. Which horse had the fastest time to finish the Kentucky Derby in 2020, and how much faster was it compared to the slowest horse?
2. How do the times to finish the Kentucky Derby for Authentic and Tiz the Law compare to the other horses in the data table?

Name: _____

Directions: Read the article below, then answer the questions that follow.

Born Into Slavery, this man won the Kentucky Derby three times and became the richest U.S. athlete

By Erin Blakemore, Timeline, Timeline, adapted by Newsela staff

Many people know about famous African American athletes like Jackie Robinson and Jesse Owens. However, few people know about Isaac Burns Murphy.

Murphy was one of the most important jockeys in the history of horse racing. He was the first person to win the famous Kentucky Derby race three times. At one point, he was the highest-paid jockey in the United States. He had the best winning average in horse-racing history. With all these accomplishments, it is pretty shocking that so few people know who Murphy is.

Murphy was born into slavery in Clark County, Kentucky, in 1861. Murphy gained his freedom after the Civil War and started working for a horse breeder named James T. Williams. Williams taught Murphy how to care for and exercise horses. One of his mother's friends took a special interest in Murphy. He taught Murphy about horse racing. Murphy's small size made him a perfect jockey.

Pellom McDaniels III wrote a book about Murphy. He says many of the African American jockeys of the time had been around horses their whole lives. As a result, they were often very good jockeys. However, Murphy and other black jockeys could only train and race white men's horses.

Three-Time Kentucky Derby Winner

At 14 years old, Murphy won his first race. He was known for being gentle with the horses. He was also famous for exciting race finishes.

Murphy won many races. Still, his Kentucky Derby victories were his most famous wins. Murphy won three times — in 1884, 1890 and 1891. In 1890, he raced against a famous white jockey named Ed "Snapper" Garrison. Horse racing was changing. More white jockeys began competing after they noticed the prizes being given to black jockeys. Murphy easily beat Garrison. Still, his win was downplayed by some viewers and journalists.



An 1885 portrait of Isaac Murphy wearing his jockey uniform. Photo: Photographs Division Washington, D.C./Library of Congress

By 1887, Murphy had become one of the United States' most famous and best-paid athletes. Murphy challenged ideas about black Americans. There was a belief that African Americans could not be rich. Murphy proved this was not true.

However, things got hard for Murphy and other black jockeys. White jockeys worked together to exclude African American jockeys from important racing opportunities. Murphy was being left out of the sport he built. People started calling him a "colored jockey," instead of just a jockey.

Unknown After His Death

Murphy also began struggling on the track. In 1890, he was suspended for inappropriate behavior while racing. It is not clear if he had done anything wrong. Still, Murphy never made a comeback after the suspension.

Like other jockeys, Murphy struggled with his weight. He often starved himself to make sure he was light enough to race. In 1896, Murphy died at 35 years old after fighting an illness.

Murphy won nearly half the races he entered, a record in the sport. Still, Murphy soon became unknown. McDaniels says this is not surprising. Similar things happened to black athletes in other sports. Through public competitions, African American men could prove that they were equal to white men, McDaniels says. Still, McDaniels adds that white Americans would not accept that black people were equal to them. As a result, many black athletes like Murphy were forgotten.

The horse-racing world still celebrates Murphy's achievements. Murphy was recognized at the National Museum of Racing and Hall of Fame in 1955. He was the first jockey ever to be given the honor.

Reflection Questions

1. What is something that surprised you about this article?

2. What is one question you still have about horse racing or the Kentucky Derby after reading this article?

3. What is something that you already knew about this topic?

4. What about this article changed or confirmed your thinking?

Name: _____

Order of Operations**P E M D A S**

Parenthesis ► Exponents ► Multiplication ► Division ► Addition ► Subtraction

Directions: Simplify each expression.

1.) $4 \cdot 7 - 6^2 \div 3$

2.) $2^3 + 6^2 \div 9$

3.) $10 - 18 \div 3 + 1$

4.) $40 + 5^2 - 7 \cdot 4$

5.) $3(12 - 5) + 8 \cdot 4$

6.) $8^2 + 6(14 - 12)$

7.) $2^4 - 24 \div 3 + 1$

8.) $(31 - 11) \div 5 + 2$

9.) $(3 + 4)^2 - 32$

10.) $54 \div 6 + 2(8 - 3 \cdot 4)$

11.) $(19 - 7) \div 4 + 11$

12.) $11^2 - 8 \cdot 7 + 2$

13.) $6 \cdot 5 - 4^2 \div 2$

14.) $8(12 - 9)^2 - 4 \cdot 7$

15.) $6 \cdot 3 + 4 \cdot 8 - 3^3$

16.) $5(13 - 8) - 3 \cdot 7 + 3$

BONUS: $4(3 \cdot 2) + (8 - 3)^2 - 6^2 + 3 \cdot 9 - 2^3 + 1$

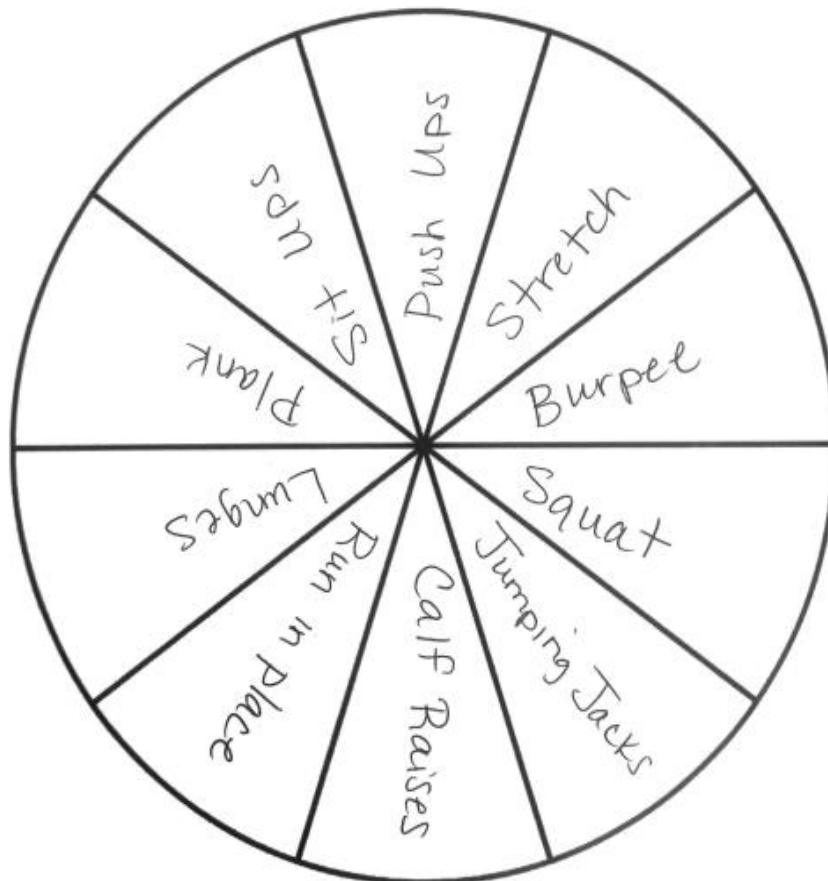
PHYSICAL EDUCATION – 6TH GRADE

Name: _____

AMI Day 3 Wheel of Fitness

Directions: Use the spinner below to complete 3 rounds of the Wheel of Fitness and take a 2-3 minute break between each round. First, use a pencil and paper clip to spin and land on an activity. Complete the activity you land on for 30 seconds. After you complete the activity spin again and complete the next activity for 30 seconds. Repeat this process 5 times to complete a round. Use the table below to record which activities you did each round.

	Round 1 Exercises	Round 2 Exercises	Round 3 Exercises
Spin 1			
Spin 2			
Spin 3			
Spin 4			
Spin 5			



READING – 6TH GRADE

Name: _____

For each AMI snow day, students should spend 20 minutes reading. Please use the space below to log your reading.

Title: _____

Format (mark one)

_____ Book

_____ Magazine

_____ eBook

_____ Other: _____

Minutes spent reading: _____

ELECTIVES – 6TH GRADE

Student Name: _____

Directions: Choose **ONE** activity from this list of options to complete for each day of AMI work. Please have an adult initial any activities that you complete for AMI days.

Art	Draw or paint a still life picture of something in your home. _____ initials _____ date	Create a short movie about what you like to do on a snow day _____ Initials _____ date
Music	Practice your band instrument. _____ initials _____ date	Listen to your favorite song and sing along, or . . . Compose an original song. _____ Initials _____ date
Industrial Tech PLTW EbD	Repair something in your home, or . . . Build a fort, either inside your home or with snow outside. _____ initials _____ date	Create a Rube Goldberg machine, or . . . Build a bridge out of something in your home. _____ Initials _____ date
Drama	Act our or record a skit with a family member or friend. _____ initials _____ date	Watch a comedy movie or musical. _____ Initials _____ date
Family and Consumer Science	Ask your adults about budgeting tips. _____ initials _____ date	Make yourself a snack using or creating a recipe. _____ Initials _____ date
World Language / Cultures	Find something in your home from another country and write or tell someone about it. _____ initials _____ date	List your favorite holiday traditions and ask family members or acquaintances about their origins. _____ Initials _____ date