

Finding Your Stride Length Student Worksheet

Name _____

I. Finding Your Stride Length

1. Walk the 100-ft section three times and count the number of steps you take each time. Remember:

Walk in a normal way!!

1st _____

2nd _____

3rd _____

2. Find the average of your three numbers. _____Average

3. Divide 100 by your average number.

Feet per step. (This is your stride length.)

You can use your stride length to estimate distances. Count the number of steps you take and multiply it by your stride length. This will give you the estimated distance you walked in feet.

TRY IT!!

10 steps = _____ feet

25 steps = _____ feet

You may not get the same answer as your buddy, but they should be close.

II. How Many Fans?

We are going to use your stride length to estimate the number of fans that can sit down in the football stadium or gymnasium.

1. Count the number of steps you take from one end of the bleacher to the other end. _____steps

2. Using your stride length, estimate how long the bleacher is. _____ feet

3. How many bleachers are on this side? _____ bleachers

4. How long would all of the bleachers be if we placed them end to end? _____ feet

5. How 10-ft sections of bleachers would there be? _____sections

6. How many people can sit comfortable in a 10-ft section? _____ people

7. How many people can sit on this side? _____ people

Now repeat this procedure on the visitor side and estimate the number of people who can sit on that side.

8. What would be the total number of people who could sit in the stadium?

_____ people

9. Estimate the average weight of an adult person. Use this estimate to calculate the total weight supported by the bleachers when there is a full crowd at a game. Show your calculations below.

_____ Pounds

_____ Tons

10. Do you consider your estimate to be accurate? Is this estimate high or low? Explain.

III. Just How Long Is The Hallway?

Now we will use your stride length to calculate the length of the hallway.

1. Starting at one end, count the number of steps you take from one end to the other end.

_____ steps

2. Using your stride length, estimate the distance of the hallway.

_____ feet

3. Suppose that you wanted to walk a distance of 1 mile. How many steps would you have to take to walk one mile? Show your work below. Remember: There are 5,280 feet in one mile.

_____ steps

4. How many steps would you have to take to walk 5 miles? Show your work below.

_____ steps

5. What other practical applications arise if we can calculate the distance without measuring?

Finding Your Stride Length

Grading Rubric

Grading Scale	Criteria
EXCELLENT 4	-Awesome participation in measuring activity -All answers completed and rounded correctly -Great summary paragraph with clear concise sentences showing complete understanding of estimating strategies, predicting, and using indirect measurement.
GOOD 3	-Good participation in measuring activity -All answers completed -Good summary paragraph with complete sentences showing understanding of estimating strategies, predicting, and using indirect measurement.
SATISFACTORY 2	-Adequate participation in measuring activity -Most answers completed -Summary paragraph contains incomplete sentences or thoughts about understanding estimating strategies, predicting and using indirect measurement.
NOT YET 1	-Unsatisfactory participation in activity -Some answers completed -Summary paragraph is poorly written with no grasp of understanding or thought process concerning estimating strategies, predicting and using indirect measurement.