

**Dynamic Physical Education Lesson Plans  
for Elementary and Secondary School Students<sup>®</sup>**  
Calculating Stride Length  
Grades 4-12

**Objectives:**

- To learn how to accurately determine personal stride length
- To be able to calculate distance covered using stride length as a multiplier

**Equipment Required:**

- One pedometer for each student
- Tape measure & cones
- Stride length record sheet
- Pencils
- Containers for pedometers

Instructional Activities	Teaching Hints
<p>1. Set up a stride length measurement station by placing two lines 20 feet apart. Mark the starting and end points with cones so it is easy for students to see the station points.</p> <p>2. Students will count the number of steps it takes to travel between the lines. Have students start 10-15 feet behind the starting line and walk toward the line at a normal pace. Students count their first step as the one that touches the ground inside the start line. Continue walking and counting steps until a foot touches outside the finish line. That is the number of steps they will use to calculate their stride length.</p> <p>3. Students record the number of steps it took to cover the distance.</p> <p>4. Divide 20 feet by the number of steps to find stride length. The answer will be in feet and 10ths of feet.</p> <p>5. Repeat two more times to make sure you get the same answer.</p> <p>6. Calculate how much distance you cover every 1000 steps.</p>	<p>Set up multiple measurement stations around the area to speed up the process.</p> <p>The reason 20 feet was selected is that it assures students will not have to divide by a double digit number. This is not an issue for middle/high school youngsters so the distance should be increased to 50 to 100 feet for greater accuracy.</p> <p>Stride length is the least accurate measure when using a pedometer because of the great variation in stride length during a typical day of activity.</p> <p>However, many individuals want to know approximately how far they have traveled.</p>

# Calculate Your Stride Length

1. Stand on the starting line.
2. Reset your pedometer.
3. Walk to the finish line. Stop when a foot touches or crosses the finish line.
4. Record the number of steps you took.
5. **Your Step Count** ) **20** Then do the math!
6. Repeat by walking from the finish to the start.



# Start

Walk in a straight line toward the finish line.

# Finish

Reset your pedometer.

Walk in a straight line to the starting line.



# Calculating Your Stride Length

	Trial #1	Trial #2	Trial #3
1. Number of steps in 50 feet			
2. Divide the number of steps into 50 feet			
3. My Stride Length			



# Calculating Your Stride Length

	Trial #1	Trial #2	Trial #3
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