

## Walking Speed

1. Walk normally without stopping, counting your paces, while your partner records every 20 seconds the total number of paces you have completed. Enter your results in the data table below:

Time in Seconds	Total Number of Paces
0	
20	
40	
60	
80	
100	
120	

Table 1: Walking at normal speed.

2. Graph the number of paces vs. time. Label your graph clearly.
3. What is the average rate of change of the normal walking speed graph? (include units)
4. Walk fast for the same amount of time. Record your results in the data table below.

Time in Seconds	Total Number of Paces
0	
20	
40	
60	
80	
100	
120	

Table 1: Walking at fast speed.

8. Graph the number of paces vs. time on the same graph with a different color. Label your graph clearly.
9. What is the average rate of change of the fast walking speed graph? \_\_\_\_\_
10. How can you tell from the graph which walk was faster?

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11. Write an equation for the number of paces as a function of time for your normal speed.

12. Write an equation for the number of paces as a function of time for your fast speed.

13. Measure the length of your pace at normal speed in centimeters. \_\_\_\_\_

14. How many centimeters per second do you walk at normal speed? \_\_\_\_\_

15. How many inches per second do you walk at normal speed? \_\_\_\_\_  
(1 inch is the same length as 2.54 centimeters)

16. How many feet per second do you walk at normal speed? \_\_\_\_\_

17. How many miles per hour do you walk at normal speed? \_\_\_\_\_

18. How far away is your home in miles? \_\_\_\_\_

19. At normal speed how long would it take you to walk home? \_\_\_\_\_

