

Motion Unit - *Speed Walking*

Before You Begin: Properly label your paper.
Describe *speed* in your own words.

Question: Keeping both feet on the floor at all times, how fast can you walk 5 meters?

Prediction: Record and label your prediction on your paper. (You are to predict how fast you think you will go.)

Materials:
Masking tape Meter stick Stopwatch

Procedure: **Create a storyboard for this procedure on your paper.**

1. Use the metric tape or meter stick to measure a 5 meter line on the floor. Mark the beginning and end of the line with a piece of masking tape.
2. Have your partner time how long it takes you to walk the 5 meters. Keep both feet on the floor the entire time!
3. Record your data.
4. Repeat for a total of 5 trials.
5. Switch places and time your partner.
6. Find your average time, (add up all 5 times and then divide by 5)

Data: **Put a copy of this data table on your paper.**

Speed Walking Data Table

	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5	Average time
Time to walk 5 m						

Calculations:

My average **speed** is (show your calculations): (***Do this on your paper!***)

Use the formula $Speed = Distance \div Average Time$ to find your average speed while walking.

Questions: **Answer these questions on your paper!**

1. Use your textbook or class notes to define / describe:
 - a. Average speed
 - b. Constant speed
2. Look at the formula for speed again. If you knew the speed of a moving object and the distance the object went, explain how to find the *time* it took for the object to move.
3. Look at the formula for speed again. If you knew the speed of a moving object and the time it took to move, explain how to find the *distance* the object traveled.
4. How long would it take you to walk 100 meters?