Speed Challenge

Name _____

Get Ready!

Step 1: Gather your materials!
Each team needs 2 timers, 1 meterstick, 1 roll of masking tape, and 1 marker.

Step 2: Create your "race" track!
Find a spot in the hallway and measure off a 10 meter race track. Use three pieces of tape to mark the beginning, middle, and end of your track. Mark each distance (0 m, 5 m, and 10 m) on the tape with a marker.

Step 3: Go for it!
Each team member will need to perform the following tasks for each distance: hopping, walking backwards, walking (regular rate), and speed walking. Your team will need people with timers or stopwatches at the 5 meter and 10 meter points. Record the time it takes to perform each task.

NOTE: Speed walking is going as fast as you can <u>without</u> jogging or running!

Collect That Data!

Record your data from the experiment in the chart, then use the information to calculate the speed for each task and distance. Round answers to the nearest hundredth if needed. Label your answers!

Task	Distance	Time	Speed
Hopping	5 m		
	10 m		
Walking Backwards	5 m		
	10 m		
Walking Regular	5 m		
	10 m		
Speed Walking	5 m		
	10 m		

Think About It!

1. Which task and distance resulted in the fastest speed?

   Task = _____ Distance = _____ Speed = _____

2. Which task and distance resulted in the slowest speed?

   Task = _____ Distance = _____ Speed = _____

3. How far could you speed walk in 10 minutes based on your speed for the 10 meter trial? Show your work!

4. How long would it take you to hop 30 meters based on your speed for the 5 meter trial? Show your work!

5. How far could you travel walking backwards in 15 minutes based on your results for the 5 meter trial? Show your work!

6. How long would it take you to walk (regular rate) 1 kilometer (or 1,000 m) based on your speed for the 10 meter trial? Show your work!

7. Are your results accurate? Why or why not?

Speed Challenge Answer Key

1. Which task and distance resulted in the fastest speed? **Answers will vary**

2. Which task and distance resulted in the slowest speed? **Answers will vary**

3. How far could you speed walk in 10 minutes based on your speed for the 10 meter trial? Show your work!
Answers will vary. Students should use their results to calculate a distance using the formula S=D÷T. The speed would be equal to the speed from the speed walking 10 meter trial and time should be 10 minutes. Students will need to multiply the speed by the time to find the distance.

4. How long would it take you to hop 30 meters based on your speed for the 5 meter trial? Show your work!
Answers will vary. Students should use their results to calculate a distance using the formula S=D÷T. The speed would be equal to the speed from the hopping 5 meter trial and distance should be 30 meters. Students will need to divide the distance by the speed to find the time.

5. How far could you travel walking backwards in 15 minutes based on your results for the 5 meter trial? Show your work!
Answers will vary. Students should use their results to calculate a distance using the formula S=D÷T. The speed would be equal to the speed from the walking backwards 5 meter trial and time should be 15 minutes. Students will need to multiply the speed by the time to find the distance.

6. How long would it take you to walk (regular rate) 1 kilometer (or 1,000 m) based on your speed for the 10 meter trial? Show your work!
Answers will vary. Students should use their results to calculate a distance using the formula S=D÷T. The speed would be equal to the speed from the walking 10 meter trial and distance should be 1000 meters. Students will need to divide the distance by the speed to find the time.

7. Are your results accurate? Why or why not?
Answers will vary.