Speed Challenge

Name: _____ Per: _____

Directions: You will work in groups of 4. You will have a 10m "track" with marks at 0, 5, and 10m. Each team member will need to perform the following tasks for each distance: hopping, walking backwards, walking (regular rate), and running or 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 without jogging or running!

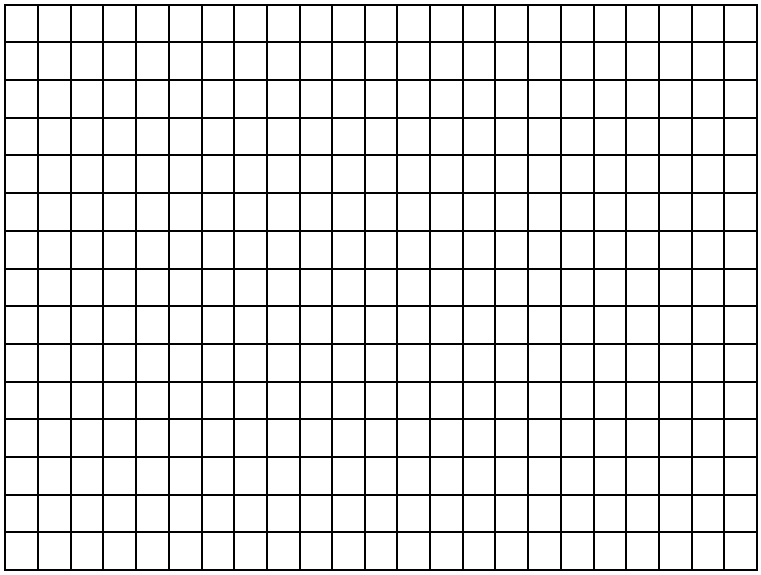
Record your data from the experiment in the chart, then use the information to calculate the speed for each task and distance. Round answers to the nearest tenth.

Task	***Distance (Meters)***	***Time (Seconds)***	***Speed (m/s)***
Hopping	5m		
	10m		
Walking backwards	5m		
	10m		
Walking regular	5m		
	10m		
Speed walking/Running	5m		
	10m		

Questions

1. Use the information in the table above to plot a **Distance** vs **Time** graph to show your average speed for the **10m trial** for each activity.
   a. Make sure the independent and dependent variables are placed on the right axes.
   b. All graphs must have an appropriate title, A key, and an appropriate scale.

2. Use the information in the above table to create a speed/ time graph showing your speed at 5 and 10m. Remember, title, label on each axis, a key and an appropriate scale must be on each graph.



3. Which task and distance resulted in the steepest slope?

Task = _____ Distance = _____ Speed = _____

4. Which task and distance resulted in the slowest speed?
   Task = _____ Distance = _____ Speed = _____

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

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

7. How does your speed in the first 5 seconds compare to your overall speed?