Speed Challenge Lab

In today's lab, you will work together with your group to collect data related to distance and time for a number of tasks. You will use the data to calculate speeds for each task and solve related problems.

Group Materials

- 1 group lab data sheet
- 2 timers
- 1 speed track
- 1 lab response sheet per member

Group Tasks

- All group members must take on at least one task from the list, some may take on more than one.
- All group members will perform the regular walking task.
- Fill in the table below with the group tasks.

Task	Which group member will do this?
5 m timer	
10 m timer	
Regular walking	All group members
Walking backwards	
Speed walking	
Hopping	
Gym scooter boarding	

	Procedure 1. Each team member will perform his or her assigned task for each distance (5 m and 10 m). Record the time it takes to perform each task in Data Table #1. 2. After recording the time for each task, use the data in Data Table #1 to calculate the speed for each task and distance. Be sure to use appropriate units! Round speed to the nearest hundredth if necessary.

Data Table #1

Task	Distance	Time	Speed
Regular walking	5 m		
	10 m		
Walking backwards	5 m		
	10 m		
Speed walking	5 m		
	10 m		
Hopping	5 m		
	10 m		
Gym scooter boarding	5 m		
	10 m		

Speed Challenge Lab Response

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	

Show your work for the following questions!

3. How far could you/your group member speed walk in 10 minutes based on your/their speed for the 10 m trial?

4. How long would it take you/your group member to hop 30 m based on your/their speed for the 5 m trial?

5. How far could you/your group member travel walking backwards in 15 minutes based on your/their speed for the 5 m trial?

6. How long would it take you to walk (at a regular pace) 1 km based on your speed for the 10 m trial?

Part 2: Distance vs. time graph: (Left side)

1. Create a distance vs. time graph for all tasks for 5

Speed	

meters.

2. Create another distance vs. time graph for tasks for 10 meters.