

Graph Matching

Physics

Name _____

1 2 3 4 5 6 7 8

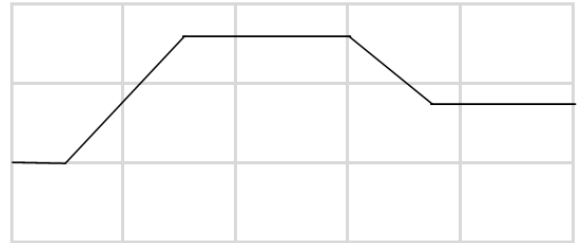
In this lab, you will be moving your body to match a distance vs. time graph.

Part I - Setup

- 1- To begin, your lab group will need to connect your motion detector to the computers in the room.
- 2- When your equipment is correctly plugged in, you will then open the logger pro software on your computer (start menu>all programs>vernier software>logger pro)
- 3- In the logger pro program, open the file 01b graph matching (file>open>physics with vernier>01b graph matching)
- 4- **Have your teacher check your computer to confirm that you are correctly set up before you move on.**

Part II - first steps

You now have a computer graph that looks like the graph at right. Predict how you will walk to create this same graph. Be specific.



Now, using the motion detector, recreate the graph on the screen.

Original Distance vs Time Graph Shape	How did you walk to create this? BE SPECIFIC!	
	<table border="1" data-bbox="1437 1037 1539 1136"><tr><td>Teacher Initials</td></tr></table>	Teacher Initials
Teacher Initials		

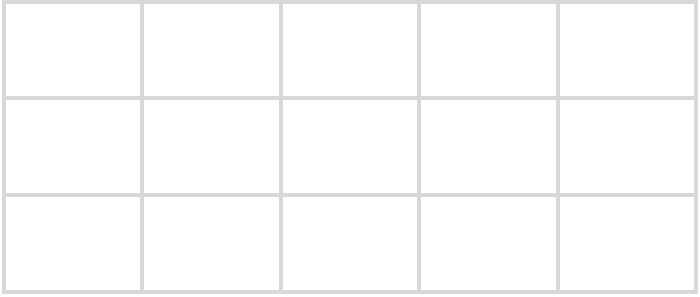
Part III - The Challenge

For the challenge, you must first open “01a graph matching” (file>open>physics with vernier>01a graph matching) When you have the correct file open, you will only see a blank graph. To receive your challenge click analyze>graph match (analyze is on the top information bar). You may click this several times until you have a graph that you like.

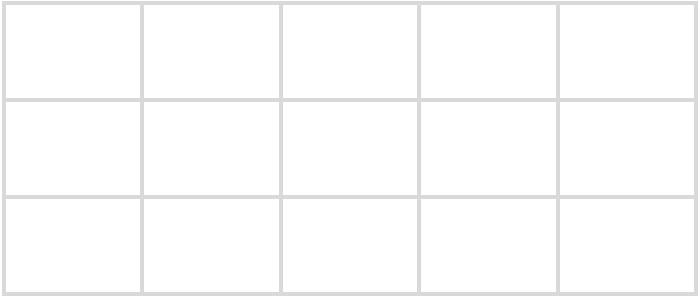
Complete the table below

Original Distance vs Time Graph Shape	How did you walk to create this? BE SPECIFIC!	
	<table border="1" data-bbox="1437 1642 1539 1740"><tr><td>Teacher Initials</td></tr></table>	Teacher Initials
Teacher Initials		

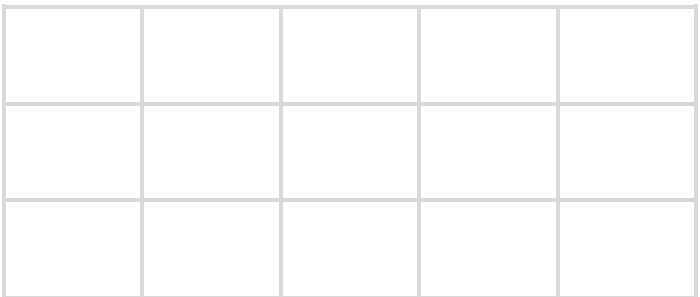
Create a new graph and complete again!

Original Distance vs Time Graph Shape	How did you walk to create this? BE SPECIFIC!	
	<table border="1" data-bbox="1437 159 1546 262"><tr><td data-bbox="1437 159 1546 262">Teacher Initials</td></tr></table>	Teacher Initials
Teacher Initials		

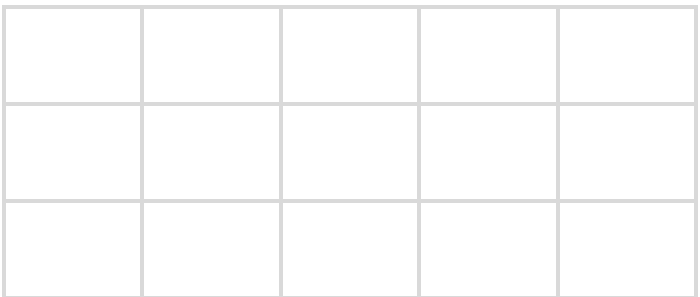
Try and choose a really hard one this time.

Original Distance vs Time Graph Shape	How did you walk to create this? BE SPECIFIC!	
	<table border="1" data-bbox="1437 609 1546 711"><tr><td data-bbox="1437 609 1546 711">Teacher Initials</td></tr></table>	Teacher Initials
Teacher Initials		

Keep Going!

Original Distance vs Time Graph Shape	How did you walk to create this? BE SPECIFIC!	
	<table border="1" data-bbox="1437 1058 1546 1161"><tr><td data-bbox="1437 1058 1546 1161">Teacher Initials</td></tr></table>	Teacher Initials
Teacher Initials		

Just one more time...

Original Distance vs Time Graph Shape	How did you walk to create this? BE SPECIFIC!	
	<table border="1" data-bbox="1437 1507 1546 1610"><tr><td data-bbox="1437 1507 1546 1610">Teacher Initials</td></tr></table>	Teacher Initials
Teacher Initials		