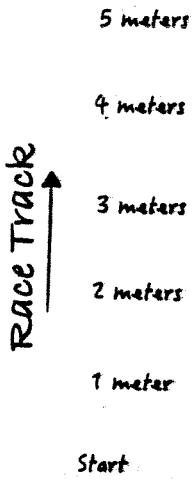
Name: _____

Hot Wheelin' Physics

Instructions:

1) Work in groups of 6
2) Get masking tape and a meter stick.
3) Use the tape to make a starting line and tape a mark every 1 meter for a straight, 5 meter long race track.
4) Return your tape and meter stick.
5) Get a pull-back race car.
6) Work together to race the car on your track 3 times. Each time, record the time it takes the car to get to EACH tape mark.
7) Complete the calculations and questions using your group's data.



Data Tables:

Trial 1:

POINT	DISTANCE	TIME
A		
B		
C		
D		
E		

Trial 2:

POINT	DISTANCE	TIME
A		
B		
C		
D		
E		

Trial 3:

POINT	DISTANCE	TIME
A		
B		
C		
D		
E		

Speed = Distance ÷ Time

1. Calculate the average velocity for each trial using the <u>total time</u> and <u>total distance</u>. Show your work!

Trial 1: _____ Trial 2: _____ Trial 3: _____

2. Calculate the speed from Point B to Point C for each trial. Show your work!

Trial 1: _____ Trial 2: _____ Trial 3: _____

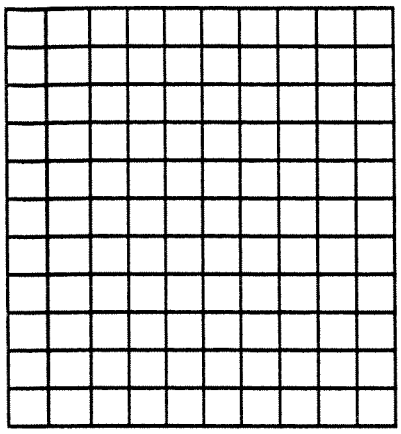
Name: _____

3. Calculate the speed from Point D to Point E for each trial.
   Show your work!

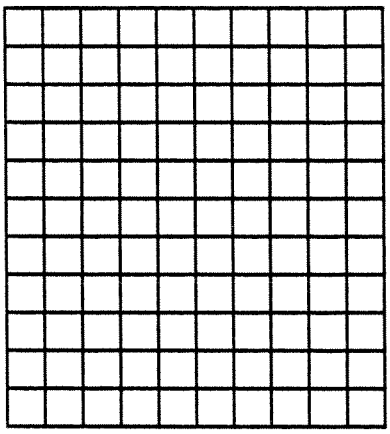
Trial 1: _____ Trial 2: _____ Trial 3: _____

4. Construct a graph to show your results. Be sure to label each graph!

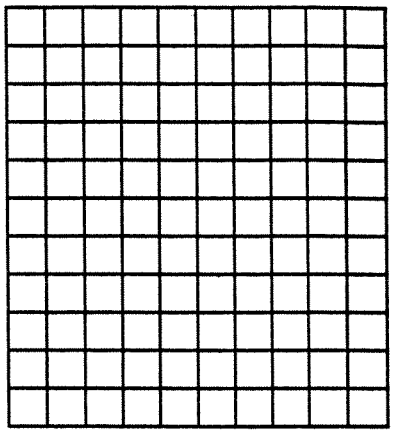
Trial 1:



Trial 2:



Trial 3



5. Do your graphs represent a constant speed or an average speed?

_____

_____

6. Are these results reliable? Why or why not?

_____

_____

_____

_____

_____

_____