Take a Walk !

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Objectives :

- to calculate the speed of our normal walk in meters/second
- to graph our acceleration
- to practice using the metric system.
- to do statistical data analysis.

Procedure :

1. Measure out 15 meters.
2. At the 0, 5, 10, & 15 m, mark with masking tape.
3. One student will be at the 0m start mark, one at 5m, one at 10m, and finally one at 15m.
4. The student at the start line will hold their arm up in the air, the other 3 will be at their places with stopwatches waiting for the signal.
5. As soon as the student is ready, he/she will lower their arm and start walking. The other 3 will start their stopwatches at the **same exact time.**
6. Time will be recorded at the 5, 10, and 15m mark.
7. Rotate through until each one has had a turn.

Data :

Table 1 : Walking Data (half page)

Student	Time for 5 m (seconds)	Time for 10 m (seconds)	Time for 15 m (seconds)	speed=total distance/ time (meters/second)
1				
2				
3				
4				

Figure 1 : Line Graph of Time vs. Distance for your group (whole page, 4 lines w/ key)

Figure 2 : Stem and Leaf of Average Speed m/s for Whole Class (half page)

Table 2 : Summary Data Table of Average Speed m/s for whole class (half page)

	n	max	min	range	sum	avg	median
Whole Class							

Analysis/Results :

1. Look at your graph. Was your line a straight line? Explain why or why not.
2. What was your Average Speed ?
3. How long would it take you to travel 20 m?
4. How about 100m?
5. Look at your class data for average speed. What was the average speed?
6. How do you compare to the class average? Explain.

Conclusion:

2-3 sentences on what you learned