$\qquad$
Date $\qquad$
Unit 1 Driving Question(s): $\qquad$

## Distance us. Displacement Investigation

Objective: You will be able to explain the difference between distance and displacement by taking real measurements.

Procedure: You have been given a map of the school with five points located on it. You must decide in your group how you will determine the distance between each point. You will then travel to these points taking measurements and recording data. You will also be timing how long it takes to get to each of these points (NO RUNNING!!). Once completed, you will answer the analysis/conclusion questions below.

## Data:

| Points | Distance Travelled | Time (NO RUNNING) |
| :--- | :--- | :--- |
| $\mathrm{A} \rightarrow \mathrm{B}$ |  |  |
| $\mathrm{B} \rightarrow \mathrm{C}$ |  |  |
| $\mathrm{C} \rightarrow \mathrm{D}$ |  |  |
| $\mathrm{D} \rightarrow \mathrm{E}$ |  |  |
| $\mathrm{E} \rightarrow \mathrm{A}$ |  |  |

## Analysis/Conclusion:

What is the overall DISTANCE you travelled? $\qquad$

Between which two points does it take the longest to travel?

How long will it take you to walk from my room (Point A) to the front office (Point C)?

Calculate the average speed at which you travelled from points A to C. SHOW YOUR WORK!!

What is your overall DISPLACEMENT? $\qquad$ .

In your own words, explain the difference between distance and displacement.

