Name

Date

Period

**Measuring, Modeling, and Mapping: Directions**

Part 1- Measuring

Step 1. There are letters laid out on the floor. I will assign each group two letters. As a team you will decide which letter will be your start point and your end point.

Step 2. With your partner, measure (in meters) the distance from your start point to your end point.

Do not make a straight line from the starting point to the ending point. Also you do not have to take the most direct route- you are more than welcome to “extend” your mission.

Step 3. Record all of your information- include direction (N, S, E, or W) and distance.

(Since the location of your start and end points are large letters, discuss with your partner where on the letter paper you begin and end your measurements.)

Question/Answer-

1 The letter on the floor is obviously larger than a single point. How did you decide where on the letter card to start measuring from?

2 How carefully did you measure? (Could someone replicate your measurements exactly?)

Part 2- Modeling

Step 4. After you have answered the above questions, get a set of popsicle sticks from the front of the room.

Step 5. Use the scale (1 popsicle stick= 1 meter). On your desk, you and your partner will make a model of your path with the popsicle sticks from the measurements you took.

Question/Answer

1 How did you decide where on the desk to start your popsicle stick model?

2 How did you approximate fractions of meters using the popsicle sticks?

Part 3- Mapping

Step 6. Now transfer your path onto the boxed lines below. Make sure to add axes, scale, and units. (This is NOT going to look like a graph- think pirate map instead!)

Question/Answer

Why did you choose the map scale you did?

Could you have changed the scale to make it more readable (or larger)?

How did translating to popsicle sticks make the map making process easier? More challenging?

