

Analysis and Critical Thinking:

1. In each path you took did the order of the walker's steps or direction affect the distance or displacement? Explain.

2. Did you notice a trend in the total distance of each trial compared to the displacement of each trial? Explain.

3. Explain the difference between distance and displacement in your OWN words.

4. What is the difference between scalar and vector?

5. If you found a treasure map, would you want it to have **scalar** or **vector** directions? Circle one and explain why.

6. Sam's mom says: "We're about to eat dinner! Don't go more than a few blocks from home!" Is Sam's mom more worried about Sam's **distance** or his **displacement**? Circle one and explain why you picked it.
