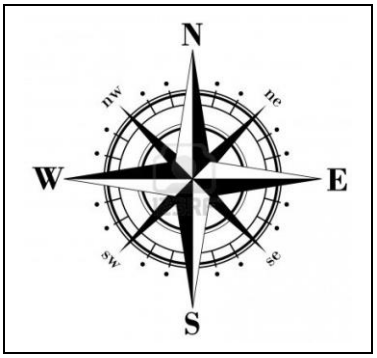
Position: Distance VS Displacement LAB




With a partner, do the following *include units* ("steps") and for displacement
Write the direction N, NE, NW, S, SE, SW, E, W: ⟶

1) Partner A: From the starting point, walk three steps forward, two steps to the right, one step back, ten steps to the left and 6 steps back.
   Partner B: Measure displacement
   Displacement:_____ Distance:_____
   (Ending distance relative to starting point.) (Total Steps taken)
2) Partner B: From the starting Point, walk 8 steps backward, 3 steps to the right, 12 steps forward, two steps to the left and 5 steps forward.
   Partner A: Measure displacement

   Displacement:_____ Distance:_____

3) Partner A: From the starting point, walk 12 steps to the right, 12 steps backward, 8 steps to the right, one step forward, and ten steps to the left
   Partner B: Measure displacement
   Displacement:_____ Distance:_____

4) Partner B: From the starting Point, walk 10 steps forward, 3 steps to the right, 5 steps backward, 2 steps to the left, 5 steps backward, and 1 step to the left.
   Partner A: Measure displacement

   Displacement:_____ Distance:_____

WRITE UP: (complete sentences!!!) on a separate sheet of lined paper!

1) What is the difference between displacement and Distance?
2) Was your data accurate?
3) What could make your data more accurate? (name at least 2 elements that could have improved your data.)
4) What two things must displacement have?
5) What did you learn overall from this lab?