

## Vectors in Science

### Aaargh! Where's my Treasure?

#### Materials:

Ruler  
Compass  
Pencil or Pen  
Paper  
Treasure

#### Procedure:

1. On a separate sheet of paper, write "Treasure Map" at the top and number from 1 to 10 down your paper.
2. Find a starting location in the classroom and tell where this location is on your #1. Describe it well enough that the next team will be able to find the exact spot.
3. Using your compass and ruler to give precise directions to leave the classroom. For example, from my storage lab door in the back of the room, I would say:
  - #1. Start at the center storage lab door in the far back of the room.
  - #2. Go 10 feet due west. (That puts them in the hallway)
  - #3. Go 40 feet due North (that puts them outside)
4. Use at least 10 different directions to lead another group to your treasure.
5. Once you have completed your directions and arrived at your "treasure spot", take the object I gave you and place it where the next team will not see it from a distance but must actually follow your directions to find the object.
6. Return to class and teams will switch treasure maps and then must follow the other teams directions to find the treasure!

#### Conclusion:

1. On a piece of paper, draw a map of your teams directions to your treasure. Show the path you took to get to the treasure.
2. Were your directions precise enough for the other team to follow them correctly? Did the other team find the treasure?
3. How could you have been more precise in your directions to have made finding the treasure easier?
4. How difficult were the other team's directions to follow? Did you find the treasure?