**Vector Scavenger Hunt**



 **Objectives**

 Create a series of directions that lead to a specific object in the classroom. Follow directions to locate a specific object. Write one resultant direction for the 7-8 directions given.

**Procedure**

1. In this lab, you will establish an origin, a frame of reference-set of directions, and use standard units to direct other students to the object. You will hide your treasure in this location.

 2. Plot out a course from the starting point to the chosen object. Remember to work secretively and quietly.

 3. You will break up the course into 7-8 different segments, and you will write each separate segment as a distance and a direction on an index card. Each card must contain a complete description of that segment. including the magnitude of the distance in meters and the direction. The direction must be specific, using only these terms: north, south. east, west, up, and down.

4. Keep in mind that the cards may be used to describe the most direct path from the starting point to the object, broken up into 7-8 segments, or they may describe a complicated path with many changes of direction.

 5. When you have completed 7-8 cards that give an accurate description of a path between the starting point and the chosen object, place them in an envelope and turn in to Mrs. Lange.

7. When you turn in your cards, your teacher will shuffle them well and give the shuffled cards to another lab group. You will receive a shuffled deck of direction cards made by another group.

8. Devise a plan to use the directions on the cards you have been given to find the object chosen by the other group, then attempt to find the object.

9. When you find the object, go back through the cards to make sure you have correctly identified the object selected by the other group. Verify with Mrs. Lange that you have found the correct object.

 **Analysis:**

1. Were you able to find the object based on the directions given?
2. What feedback would you like to give the group that wrote your directions?
3. Based on the location of the object and the frame of reference given, could you have written one direction to get to your object? Please try it and write it on the outside of the envelope.