

Name: \_\_\_\_\_  
Mr. Willis  
Conceptual Physics: \_\_\_\_\_  
Date: \_\_\_\_\_

Unit II  
Motion (Velocity/Acceleration)  
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## Video: ESPN Victory with Vectors

**Directions:** Complete the following questions as you watch the video.

1. Speed is how \_\_\_\_\_ something goes.
2. The speed, 82 mph, or distance, 400 feet, represent the amount or \_\_\_\_\_ of the motion.
3. Motion and speed are \_\_\_\_\_ quantities.
4. However motion and direction together are called \_\_\_\_\_.
5. Speed and direction together are called a \_\_\_\_\_ quantity.
6. All motion can be broken down into its \_\_\_\_\_.
7. A \_\_\_\_\_ vector can be used to show how a runner gets from home to 1<sup>st</sup> base.
8. On a Cartesian graph the axes are labeled \_\_\_\_\_ and \_\_\_\_\_.
9. When graphing vectors (the speed and direction something moves) the labels are changed to i and j and the third dimension is labeled \_\_\_\_\_.
10. The k axis allows us to map the baseball's velocity in the \_\_\_\_\_ direction.
11. The wind's vector quantities are negative because they are traveling in a direction \_\_\_\_\_ that of the ball.
12. Vector quantities can be added together and the answer is called the \_\_\_\_\_ vector which is indicated by a bolder arrow on the graph.