

## THE MECHANICAL UNIVERSE

### Video 5 - Vectors

Name: \_\_\_\_\_

Class: \_\_\_\_\_

1. List a few examples of systems which describe where something is:
2. What quantity has both magnitude and direction?
3. Give several examples of vectors and scalars:
4. What sort of system is vital to any map?
5. Who was the first person to introduce the idea of the complex number?
6. Explain how "triangulation" works:
7. What effect does multiplying a vector by a negative scalar have on the vector?
8. What is a vector dot product?
9. What is the right-hand rule used to find in vector multiplication?
10. In the Aristotelian world all places only had meaning with respect to what point?
11. A vector has size and position, but no \_\_\_\_\_ .