Chapter 5 Concept Review
P H Y S I C S

Directions: *Answer the following questions using your notes and textbook*

1. *Vector Quantity*– describes both _____ and _____ (size).

2. Speed is magnitude of _____ vector.

3. _____ Quantity– specified by magnitude only.

4. An _____ is used to represent the *magnitude* and *direction* of a vector quantity.

5. Length of arrow (drawn to scale) indicates _____.

6. Direction of arrow indicates _____ of vector quantity.

7. Resultant of two perpendicular vectors is the _____ of the rectangle with the two vectors as sides.

8. Use simple three step technique to find resultant of a pair of vectors that are at _____ angles to each other.

      a. First– draw two vectors with their _____ touching.

      b. Second-draw a _____ projection of each vector with dashed lines to form a rectangle

      c. Third-draw the diagonal from the point where the two _____ are touching

9. Adding vectors _____ at right angles

      a. Construct _____

      b. Construct with two vectors as _____

      c. Resultant is the _____

10. Any vector can be "_____" into two component vectors at right angles to each other

      a. These two vectors are called _____

      b. Process of determining components is called _____

      c. can resolve into _____ and _____ components

11. _____-any object that moves through the air or through space, acted on only by gravity (and air resistance, if any).

12. Horizontal component for projectile same as ball rolling freely along a level surface (when

_____ is negligible). Has constant horizontal _____.

13. Vertical component of a projectile's velocity is like motion of free _____ object.

14. Only force in vertical direction is _____.

15. Horizontal and vertical components are completely _____ of each other.

16. Path of projectile accelerating in the vertical with constant horizontal velocity forms a _____.

17. Can look at _____ and _____ components of projectile.

    a. Vertical component _____

    b. Vertical component becomes _____ at maximum height

    c. Horizontal component remains the _____

18. Path of projectile depends on the _____ of launch.

19. _____ _____ effects projectile motion. Range is diminished.

20. If air resistance is negligible, a projectile will rise to its maximum _____ in the same time it takes to _____ from that height to the ground.

21. _____- a projectile traveling fast enough to fall around Earth rather that into it.

22. The satellites curved path matches the curvature of the _____.

23. Satellites travel at high altitude (150 kilometers) so there is very little _____ (beyond Earth's atmosphere)

24.

25.