## Guided Reading Chapter 4 Section 3

- 1. Acceleration is the way we describe the changes in
  - a) time b) distance c) velocity d) none of these
- 2. Sketch the graphs in Figure 4.11.

- 3. How do you calculate acceleration (in words)?
- 4. Why do units of acceleration have two values of time associated with them?
- 5. Acceleration can be \_\_\_\_\_\_ or \_\_\_\_\_\_.
- 6. Negative acceleration is called \_\_\_\_\_\_.
- 7. Describe the movement in the following graph. Assume the movement is made by a car.



- 8. The acceleration of a free falling object is
  - a) 15.6 m/s<sup>2</sup> b) 9.8 m/s<sup>2</sup> c) 32 m/s<sup>2</sup> d) none of these
- 9. What is the difference between constant speed and constant acceleration?
- 10. T/F When drawing velocity vectors, the length represents the speed of the moving object.
- 11. If a 2 cm vector represents speed, and 1 cm equals 5 m/s, how fast is the represented object moving?
- 12. If you change your \_\_\_\_\_, you change your acceleration.
  - a) direction b) velocity c) distance d) both a & b

13. A projectile is when an object moves only under the influence of	
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a) velocity b) gravity c) time d) none of these

14. Draw Figure 4.18 on page 91. Make sure to include the key, labels and draw the appropriate arrows!

15. Another type of curved motion is called \_\_\_\_\_\_, where the

direction of acceleration is always pointed to the \_\_\_\_\_\_ of the circle.