Due: Thurs., Sept 8 (Pre-AP Physics)
Due: Fri., Sept 9 (Reg Physics)
Assigned: Tues., Sept 6 (Wed., Sept 7, Reg)

Test Review (Test: Thurs and Fri)

1. An object starts 6 meters to the right. In 3 seconds, it is 3 meters to the left. Find its velocity.

2. An object is thrown up with 20 m/s. How far up will it go in 2 seconds?

3. An object experiences an acceleration if either of two things occur:

4. A go-cart goes around a track that has a 20 m radius 6 times. If it takes 130 seconds, find the following:
   A) The go-cart's average velocity:

   B) Does the go-cart experience an acceleration during its journey?

   C) The go-cart's average speed:

5. Convert 35 cm/sec to miles per hour.

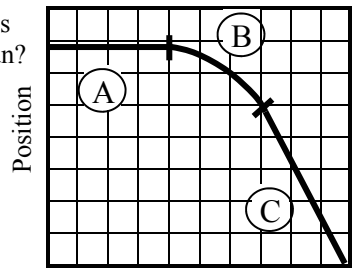
Transfer graphs:

6. What do the slopes for these graphs mean?
A) Pos. vs Time:

B) Vel. vs. Time:

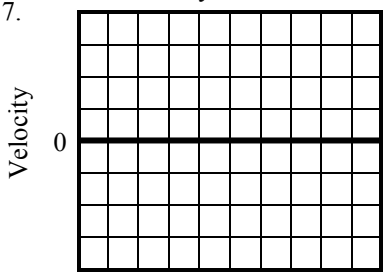
C) Acc. vs. Time:

Position vs. Time



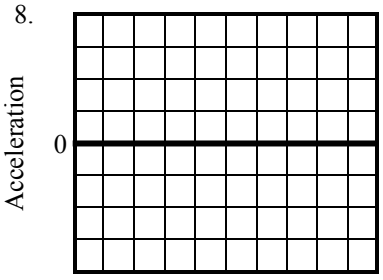
7.

Velocity vs. Time



8.

Acceleration vs. Time



(If you do not understand linear equations or area of graphs—come see me <u>before the test</u>.
No practice is given on this review.)

9. Give the answer with correct sig figs: 13.04— 2.1 = _____; 10,000 ÷ 6.02 = _____

10. To find the period of a pendulum we took multiple samples (cycles) with our timers to ensure greater accuracy and precision. Why?

11. A given sample is known to be 13.21 kg. You measure 13.62, 13.60, and 13.61. Accurate or precise?

12. What will you need to do with the above instrument?

13. The purpose of the scientific method is to find _____ that are _____. To accomplish this, a researcher must keep good records of their _____.

14. Roughly how big are these: cm: _____; a kg: _____; a liter: _____?

15. On the back, create a food web with two food chains from this list of organisms (put producers are on bottom and 3rd level consumers are on top): water algae; hawk; trout; fly; raccoon; wolf; water lily; frog; grasshopper; leaf; moss; alligator;

16. Label your food web with: plant; herbivore; carnivore; carnivore of carnivore.