**1st Quiz - 1st Qtr  Freshman Physical Science 09-22-05  Name _____  Section_____**

*(Show all work on separate sheets. *Asterisk indicates question is optional for Sections A, B & F.)*

1. *A red blood cell has a diameter of about 0.000007 meters. Express this number in scientific notation.
2. Convert 100 Km per hour into meters per second.
3. If a car is traveling at 50 mph – is this a complete measure of the vehicle's velocity? Why or why not?
4. I drive about 200 miles to visit my parents in Pittsburg. It takes 5 hours. What is my average speed?
5. You are driving to Ohio. The distance is 770 miles. You estimate that, with stops your average speed will be about 55 mph. How much time does it take?
6. How fast are you going if you go 36 meters in 53 seconds?
7. In the motion equation d = vt, what do the variables d, v & t stand for?
8. What do the prefixes kilo, centi, and milli stand for?
9. In physics, what does the Greek letter (Δ) delta mean?
10. *Solve for "n" in the following equation:

    $n + 3 = -5n$

11. *Solve for "b" in the following equation;

    $2(a)(b) = (a)(d)$

12. *For the equation y = -2x + 3, what does "y" equal when "x" equals -2 ?
13. What does the word "*per*" mean to you – as in apples ***per*** bushel?
14. Convert 343 millimeters to meters.
15. How many meters are there in one millimeter?
16. *To how many decimal places can an ordinary centimeter stick be estimated?
17. *To how many decimal places can a centimeter stick be read with no estimation of any digits?
18. What does the symbol " ~ " mean in mathematics?
19. *You are driving home on a weekend from school at 55 mph for 110 miles. It starts to snow and you slow to 35 mph for the rest of the trip. You arrive home after a total driving time of 4 hours and 15 minutes. How far is your hometown from school?
20. A motorist travels 160 km at 80 km/hr and 160 km at 100 km/hr. What is the average speed of the motorist for this trip?
21. If you run a complete loop around an indoor track (400 m), in 100 s, what is your average speed?
22. *Which of the following speeds is the greatest: 10 km/hr, 10 mph, 10 m/s or 10 ft/s.