

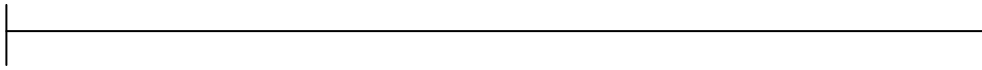
A-Day: due Mon. Aug. 21 (Assigned 8/17)
B-Day: due Tues., Aug.22 (Assigned 8/18)

Measuring 2

Mr. Murray's Regular Physics

Reminders: Have you turned in your Lab Safety Contract and Class Rules?
Have you brought a pair of closed-toed shoes to class to use during labs?

1. What is the standard metric unit for A) mass? _____; B) volume: _____; C) length: _____;
2. A) Is a gram heavy or light? B) Is a meter short or long? C) Is a liter big, small, or medium?
3. Which is bigger 10 meters or 10 centimeters?
4. A) How tall are you in meters? B) How tall are you in centimeters?
5. Roughly, how big is a liter (compared to English units)?
6. How many grams is a pencil?
7. How wide is your hand in centimeters?
8. Since you know how wide your hand is, use your hand to estimate the length of this line (in cm):



Example: 32,500 is 3.25×10^4 in scientific notation. 0.00652 is 6.52×10^{-3} in scientific notation.

9. Express the following numbers in scientific notation:
A) 3,002,000 = _____ C) 0.0620 = _____ E) 0.4502 = _____
B) 56 = _____ D) 830,001 = _____ F) 0.000003 = _____
10. If 12 inches = 1 foot and 3.3 ft = 1 meter:
A) Convert 26 inches to feet (show your work): B) Convert your answer in part A) to meters:
11. (Use the Notes: "How to Solve Word Problems" for the following.)
[Additional information: v_i = initial velocity (or before); v_f = final velocity (after)]
Car 1 initially going 6 m/sec accelerates to 18 m/s in 3 seconds. Find its acceleration.
12. Car 2 initially going 20 m/sec slows down to 8 m/sec in 3 seconds. Find its acceleration.
13. Now, using what you learned from Q 13 and 14:
A) Did Car 1 speed up or slow down?
B) Did Car 2 speed up or slow down?
C) Did Car 1 have a positive or negative acceleration?
D) Did Car 2 have a positive or negative acceleration?
E) If a car speeds up, is its acceleration is positive or negative?
F) If a car slows down, is its acceleration is positive or negative?
14. From the Bellwork:
When you eat vegetables, you are eating like a _____. When you eat meat, you are eating like a _____.
Because you eat both, you are actually a _____. Fungi (who break down organic matter) are called _____.
Plants are known as _____, animals are known as _____.