Honors Biology Measurement Review

Throughout your studies of science and math you have been exposed to the Metric System and the System International. Complete this assignment using reference resources. ASK questions during class as needed!!! You may use short phrases or bulleted answers as long as all of the information is clearly communicated.

1. What is the difference between the Metric System and the System International?

1. Which do scientists use? Why?
2. Identify the appropriate units used by scientists to measure the following, using a data table to organize your answer. Define each concept as well as list its unit and unit abbreviation. Distance, Mass, Weight, Volume, Capacity, Time, Temperature
3. Create a data table to provide an image of the equipment for each of the measurements in direction #3. There should be a photo of the equipment, its name and related measurement.
4. Define each of the following unit prefixes. Identify an item that would be appropriately measured using that prefix and its base unit. ( ex. millimeter) Organize this information in a clearly visible display. nano, pico, micro, milli, centi, deci, Deka, Hecta, Kilo, Mega,Giga, Tera
5. Explain how you would measure the volume of an acorn.
6. Explain how you would measure the density of blubber from a whale.
7. How would the mass of 1cm3 of ocean water differ from its weight?
8. What is the relationship between milliliters and cubic centimeters?
9. Complete the following. Show the problem set up as part of your answer.
10. If a paper clip weighs approximately one gram, estimate how many paper clips will be in a 0.5 kilogram box of paper clips.
11. The doctor has instructed you to take 500mg of a medication that comes in 1 gram tablets. How many of the tablets should you take?
12. A small book contains about 1.44 megabytes of data. How many books will fit on a terabyte hard drive.