Perform the following conversions, **show your setup and box your answer** for credit!

1. 25.5 mg to g
2. 4.0 x 10-10 m to km
3. 0.025 km to mm
4. 0.076 mL to L
5. 75 mL to L
6. 1.25 L to mL
7. 25 mL of pure water to g of water
8. The speed of light in a vacuum is 3.0 x 10 8 m/s. What would that be in km/hr?
9. The recommended adult dose of Elixophyllin, a drug used to treat asthma, is 6 mg/kg of body mass. Calculate the dose in milligrams for a 150 lb person.
10. Calculate the density of an object that has the mass of 12.42 g and a volume of 6 mL.
11. What is the density of an object with a volume of 23 mL and a mass of 12.19 g?
12. Aluminum has a density of 2.7 g/mL. What volume will 12 g of Al take up?
13. The density of lead is 11.34 g/mL. 25 mL of lead will have what mass?
14. The density of carbon dioxide gas is 0.0018 g/cm3. What mass of CO2 will take up 500 cm3?
15. What volume will nitrogen gas take up if its density is 0.0012 g/mL and it has a mass of 2.5 g?