Conversions Homework

gigameter	= _____	meter	gigagram	= _____	gram	gigasec	= _____	second	metric symbol
megameter	= _____	meter		=			=		
kilometer	= _____	meter		=			=		
centimeter	= _____	meter		=			=		
millimeter	= _____	meter		=			=		
micrometer	= _____	meter		=			=		
nanometer	= _____	meter		=			=		
picometer	= _____	meter		=			=		

Express the following with the appropriate prefix:

1. 10^{6} phones
2. 10^{-6} phones
3. 10^{9} lows
4. 10^{-2} pede
5. 10^{-9} Nanette
6. 10^{-12} boo
7. 2×10^{3} mockingbirds

For the above, use the reverse method as described in the presentation - instead of taking the prefix and replacing it with a number, take the number and replace it with a word.

State all 8 unity conversions for each the meter, the gram, and the second. Also include the symbol of all . Use this chart as a guide:

For the following, convert accordingly.

1. The speed limits in Paris are in km/hr. I know if go faster than 65 mi/hr in the States, I will get a ticket. Assuming the rules are the same in Paris, how fast can I go without getting a ticket?
2. While working on an construction site, I need to cement 25 square yards of ground. At Home Depot, the bags that are sold in terms of square feet. I need to know how many square feet are in 25 square yards.
3. If I earn $50 K anually (i.e. 50 kilodollars), how much do I earn per month? per day?
4. The speed of light is an imprtant constant in physics. It is 3×10^{8} m/sec. How fast is this in mi/hr? How about mi/sec?
5. I have a fan rotating at 180 rpm. How fast is this in revolutions per second?

Do the following conversions:

1. 20 mph to m/sec
2. 2 kg to gm
3. 1 ft to cm
4. 1 yd to m
5. 4 days to hours
6. 1 hour to sec
7. $2 \times 10^{4} \mu$g to kg