Name $\qquad$
Date __/___ Block $\qquad$

## Conversion Practice Problems

1. Convert 2.5 days to seconds.
2. Convert 3.5 kilometers to millimeters.
3. Convert 43 centimeters to kilometers.
4. Convert 22 milligrams to kilograms.
5. Convert 671 kg to micrograms.
6. Convert $8.76 \times 10^{7}$ megawatts to gigawatts.
7. Convert $1.753 \times 10^{-13}$ seconds to picoseconds.
8. If a car is traveling at a speed of $28.0 \mathrm{~m} / \mathrm{s}$, is it exceeding the speed limit of 55.0 $\mathrm{mi} / \mathrm{hr}$ ? ( $62.6 \mathrm{mi} / \mathrm{hr}$ )
9. The traffic light turns green and the drive of a high-performance car slams the accelerator to the floor. The accelerometer registers $22.0 \mathrm{~m} / \mathrm{s}^{2}$. Convert this reading to $\mathrm{km} / \mathrm{min}^{2}$. $\left(79.2 \mathrm{~km} / \mathrm{min}^{2}\right)$
10. Convert $4.50 \times 10^{3} \mathrm{~kg} / \mathrm{m}^{3}$ to $\mathrm{g} / \mathrm{cm}^{3}$. $\left(4.50 \mathrm{~g} / \mathrm{cm}^{3}\right)$
11. A fathom is a unit of length, usually reserved for measuring the depth of water. A fathom is approximately 6 ft . in length. Take the distance from Earth to the Moon to be 250000 miles, and use the given approximation to find the distance in fathoms. (2 x $10^{8}$ fathoms)
12. A rectangular building lot measures 100 ft . by 150 ft . Determine the area of the lot in square meters $\left(\mathrm{m}^{2}\right) .\left(1.39 \times 10^{9} \mathrm{~m}^{2}\right)$
13. The speed of light is about $3.00 \times 10^{8} \mathrm{~m} / \mathrm{s}$. Convert this figure to miles per hour ( 6.71 x $10^{8} \mathrm{mi} / \mathrm{hr}$.)
