

You can also solve these problems using the unit analysis method

1. Aspirin tablets provide 320mg per tablet. How many tablets would you administer if the dose called for 80mg?

Answer: $80\text{mg} * (\text{tablet} / 320\text{mg}) = 0.25 \text{ tablet}$ or $\frac{1}{4}$ of a tablet.

2. An antibiotic is to be dosed at 5.0 micrograms per kilogram of body weight ($5\mu\text{g}/\text{kg}$). The patient has a mass of 175lb. What dose of antibiotic should be administered?

Answer: First convert the mass to pounds (you should know that $1\text{kg}=2.20\text{lb}$), then determine the dose. $175\text{lb} * (1\text{kg}/2.20\text{lb}) * (5\mu\text{g}/\text{kg}) = 398\mu\text{g}$ of antibiotic.

3. A liquid preparation of amoxicillin has a concentration of 3 milligrams of amoxicillin per 5mL of solution ($3\text{mg}/5\text{mL}$). How many milliliters will you give if the dose calls for 7.2mg of amoxicillin?

Answer: $7.2\text{mg amoxicillin} * (5\text{mL} / 3\text{mg amoxicillin}) = 12\text{mL}$.