# NAPLEX®

## MEASUREMENT CONVERSIONS

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## WEIGHT AND MASS

- 1 kilogram (kg) = 1,000 grams (g)
- 1 gram (g) = 1,000 milligrams (mg)
- 1 milligram (mg) = 1,000 micrograms (mcg)
- 1 microgram (mcg) = 0.001 milligrams (mg)
- 1 ounce (oz) = 28.35 grams (g)
- 1 pound (lb) = 16 ounces (oz)
- 1 pound (lb) = 454 grams (g)
- 1 pound (lb) = 0.454 kilograms (kg)
- 1 grain = 64.8 mg

## VOLUME

- 1 liter (L) = 1,000 milliliters (mL)
- 1 milliliter (mL) = 0.001 liters (L)
- 1 gallon = 4 quarts
- 1 gallon = 3.785 liters (L)
- 1 quart = 2 pints
- 1 quart = 946 mL
- 1 pint = 16 fluid ounces (fl oz)
- 1 pint = 473 mL
- 1 fluid ounce (fl oz) = 29.57 mL
- 1 tablespoon (tbsp) = 15 mL
- 1 teaspoon (tsp) = 5 mL
- 1 drop (gtt) = 0.05 mL

## FLOW RATE AND INFUSION

**Calculating number of mL to infuse per hour**

$$\frac{\text{Volume (mL)}}{\text{Time (hours)}} = \text{mL/hour}$$

**Calculating IV flow rate in drops per minute**

$$\frac{\text{Volume (mL)}}{\text{Time (min)}} \times \text{Drop factor} = \text{IV flow rate in drops per minute}$$

## VOLUME

- 1 inch = 2.54 centimeters (cm)
- 1 foot = 12 inches
- 1 meter (m) = 100 centimeters (cm)

## TEMPERATURE

- Fahrenheit to Celsius: $°F = \frac{9}{5}(°C) + 32$
- Celsius to Fahrenheit: $°C = \frac{5}{9}(°F) - 32$

## CONCENTRATION

- 1% w/v (weight/volume) = 1 g/100 mL
- 1% v/v (volume/volume) = 1 mL/100 mL
- 1:1000 = 1 g/1,000 mL
- 1:2000 = 0.5 g/1,000 mL

## MOLES AND MILLIMOLES

- 1 mole = 1,000 mmol
- 1 mmol = 1 mEq for monovalent ions
- 1 mole = 1,000 mEq for divalent ions

## ENERGY

- 1 calorie (cal) = 4.184 joules (J)
- 1 kilocalorie (kcal) = 1,000 calories (cal)
- 1 kilojoule (kJ) = 1,000 joules (J)

## BODY SURFACE AREA

- Mosteller formula: $BSA(m^2) = \sqrt{\frac{\text{Height (cm)} \times \text{Weight (kg)}}{3{,}600}}$

## CREATINE CLEARANCE

- Cockcroft-Gault equation:
  (multiply by 0.85 for females)

$$CrCl = \frac{(140 - \text{age}) \times \text{weight (kg)}}{72 \times \text{serum creatine (mg/dL)}}$$