

Stoichiometry of Soda

Name: _____

Goal: To find the number of moles of various chemicals in soda and other drinks.

Drink Choice: _____

Nutrition Label facts per serving:

Sugar: _____ g Fructose (soda/juice/tea) or Lactose (milk)

Sucrose

Caffeine: _____ mg

$$\frac{\text{mg} \times 1.0 \text{ g}}{1000 \text{ mg}} = \text{_____ g Caffeine}$$

Sodium: _____ mg

$$\frac{\text{mg} \times 1.0 \text{ g}}{1000 \text{ mg}} = \text{_____ g Sodium}$$

Potassium: _____ mg

$$\frac{\text{mg} \times 1.0 \text{ g}}{1000 \text{ mg}} = \text{_____ g Potassium}$$

Molar masses:

Fructose, $C_6H_{12}O_6$

Caffeine, $C_8H_{10}N_4O_2$

Lactose, $C_{12}H_{22}O_{11}$ *Sucrose*

Sodium chloride, NaCl

Potassium chloride, KCl

Number of Moles per serving:

Fructose, $C_6H_{12}O_6$	Sodium chloride, NaCl
Lactose, $C_{12}H_{22}O_{11}$	Potassium chloride, KCl
Caffeine, $C_8H_{10}N_4O_2$	