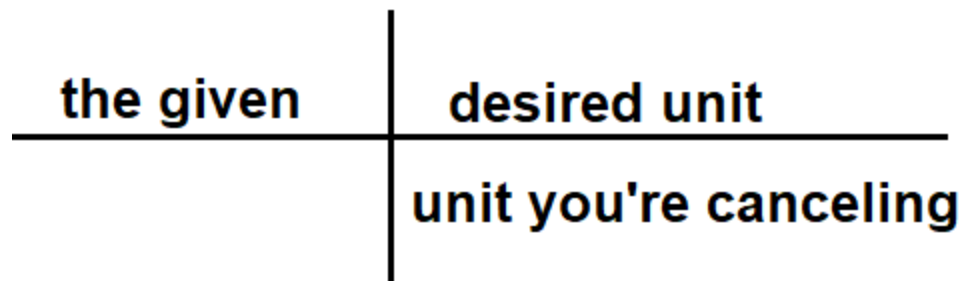


RULES FOR DOING STOICHIOMETRY

1. Write balanced equation.
2. Write the given.
3. Convert the given to moles (if necessary) using *molar mass* or *molar volume*:
 - a. Put desired unit on top.
 - b. Put the unit you want to cancel on bottom.



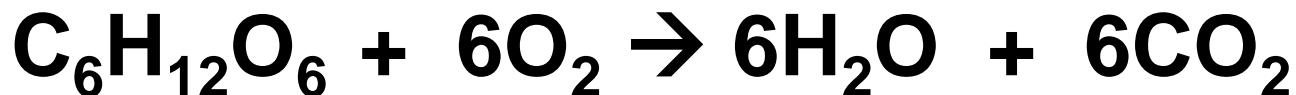
4. Convert to desired substance using *molar ratio* (of coefficients) from balanced equation.
5. Convert unit of desired substance to desired unit using its *molar mass* or *molar volume*.
6. Multiply everything across the top, then divide by the product of what's on the bottom.

STOICHIOMETRY WARM-UP

- 1. What is the percent yield if 16.0 g of glucose ($C_6H_{12}O_6$) is consumed in cellular respiration, yet only 9.8 L of CO_2 is recovered (at STP)?**
- 2. What volume of ammonia gas should be produced when 28.0 L of hydrogen is reacted with 25.0 L nitrogen at STP?**

STOICHIOMETRY WARM-UP

1. How many L CO₂ should be produced when 16.0 g of glucose (C₆H₁₂O₆) is consumed in the following reaction?



2. What volume of ammonia gas should be produced when 28.0 L of hydrogen is reacted with unlimited nitrogen?