

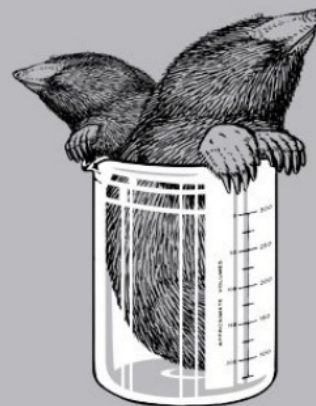
5.26.20

Mole to Mole Conversions

Today's Objectives

- Learn what coefficients stand for
- How to "change chemicals" by doing mole to mole conversions.

Figure 8
Two moles per liter



Baconator Recipe



apologies to
vegetarians!



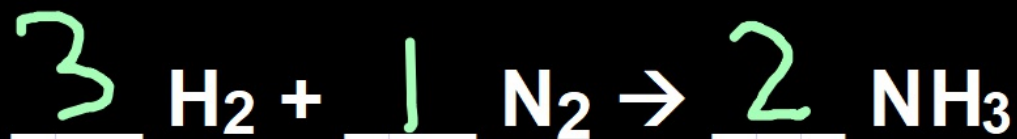
2 Bread + 2 Patties + 2 Cheese + 6 Bacons --> 1 Baconator

For a large catering order, a Wendy's has to make 100 Baconators.
How many of each ingredient will the staff need?

| | | | |
|----------------|-------------|---|-----------|
| 100 Baconators | 6 Bacon | = | 600 Bacon |
| | 1 Baconator | | |

To change chemicals, you do a moles-to-mole slide.

The numbers come from the Coefficients



Moles, Not Grams!



1 mole of H₂ will produce how many moles of NH₃?

| | | | |
|----------------------|-----------------------|---|-------------------------------|
| 1 mol H ₂ | 2 mol NH ₃ | = | 2/3 mol NH ₃ |
| 3 mol H ₂ | | | |

5 moles of H₂ will produce how many moles of NH₃?

| | | | |
|----------------------|-----------------------|---|--------------------------------|
| 5 mol H ₂ | 2 mol NH ₃ | = | 10/3 mol NH ₃ |
| 3 mol H ₂ | | | |