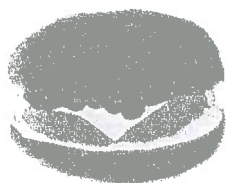


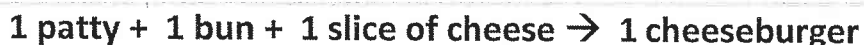
Cooking With Stoichiometry



Stoichiometry is a lot like cooking! You need certain amounts of ingredients for your recipe. A balanced chemical equation is just like a recipe!

Let's consider cheeseburgers. You need one patty, one bun, and one slice of cheese to make one cheeseburger.

The recipe (equation) looks like this:



We can say that the ratio of buns to cheeseburgers is

$$1 \text{ bun} : 1 \text{ cheeseburger} \quad \text{or} \quad \frac{1 \text{ bun}}{1 \text{ chesseburger}}$$

- 1) If you have 5 patties, 4 buns, and 4 slices of cheese, how many complete cheeseburgers can you make? _____
- 2) What would be left over? _____

Now we are going to make a breakfast plate. To make up the breakfast plate, we need 2 eggs, 2 strips of bacon, 2 slices of toast, and 1 plate. Write the equation that represents this recipe:

- 1) What is the ratio of bacon to breakfast plates (write as a fraction with "units")? _____
- 2) Ratio of eggs to bacon? _____
- 3) If you have 10 eggs, and unlimited supply of toast, bacon, and plates, how many complete breakfast plates can you make _____? How did you figure this out?