Stoichiometry is \_\_\_\_\_\_\_\_\_\_\_\_\_ of \_\_\_\_\_\_\_\_\_\_\_ of substances involved in \_\_\_\_\_\_\_\_\_\_\_\_\_ reactions.

**What you need to know:**

1. How to \_\_\_\_\_\_\_\_\_\_\_\_ an equation.
2. How to find \_\_\_\_\_\_\_\_\_\_\_\_ masses.
3. How to set up \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Steps for solving mass-mass problems**

1. \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_ the chemical equation.
2. Set up the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ using the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ equation.
3. \_\_\_\_\_\_\_\_\_\_ the \_\_\_\_\_\_\_\_\_\_\_ mass for the *\_\_\_\_\_\_\_\_\_\_\_\_\_* and for the substance *\_\_\_\_\_\_\_\_\_\_\_\_ For*.
4. Set up the conversion \_\_\_\_\_\_\_\_\_\_\_\_\_.

**Conversion T-bar**

**Example 1**

In the synthesis reaction of nitrogen and hydrogen to form ammonia, 27 g of ammonia is produced. How much nitrogen is required to produce this much ammonia?

**STEP 1: Write and balance the equation:**

**STEP 2: Find the mole equivalency:**

**STEP 3: Find the molecular masses for GIVEN and ASKED FOR substances**

**STEP 4: Set up Conversion T-bar**