|  |  |
| --- | --- |
| Example | Steps |
|  | 1. Draw a T chart under the equation. Label the left side reactants and the right side products. Write the symbol and number of atoms for each element present in the reaction on its own line on both sides. |
|  | 2. Does each element start and end with the same number of atoms? Yes → Mass is conserved and the equation is balanced No → Mass is not conserved and you need to balance the equation. (move on to step 3) |
|  | 3. If mass is not conserved, you will balance the equation by adding coefficients before molecules. \*Do not change any subscripts.\*Start with an element that only appears once on each side. On the side that has fewer atoms of that element, add a coefficient before the molecule containing that element, so that the number of atoms of that element on both sides are equal.In the T chart, multiply the coefficient by the subscript on each element in the molecule to get the new numbers of atoms. |
|  | 4. Again, does each element start and end with the same number of atoms? Yes → Mass is conserved and the equation is balanced No → Mass is not conserved and you need to change another coefficient. Repeat step 3 |

