

Curiosity: The limiting reactant is the recipe ingredient that runs out

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Coefficients are a recipe. For two hydrogen molecules and one oxygen molecule, the recipe makes two water molecules. A limiting reactant is simply the ingredient that permits the fewest complete recipe sets; atoms still remain conserved as they rearrange.

Collected product can be smaller than the theoretical recipe prediction for many measurement or collection reasons. That is a yield question, not a reason to change the balanced equation or say atoms disappeared.