

Mole Ratios: Competition Corner

Week 31 | Recipe first, calculations second

Competition Corner

Use the safe paper data cards only. Sources are in `sources.md`; distinguish a limiting ingredient from lost atoms.

1. For $2\text{CO} + \text{O}_2 \rightarrow 2\text{CO}_2$, begin with 7 CO and 4 O_2 particles. Find product and leftovers; explain your recipe sets.

2. A group has 0.500 mol Mg and 0.400 mol O_2 . Predict limiter and MgO, then critique “ O_2 is limiting because it has fewer moles.”

3. Design a data-only table that could distinguish a limiting reactant from low collected yield.