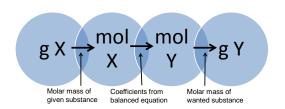
Stoichiometry

The part of chemistry that deals with proportions of substances
In chemical reactions

2 Na +	$Cl_2 \rightarrow$	2 NaCl
2 atoms	1 molecule	2 molecules
x 6.02 x 10 ²³	x 6.02 x 10 ²³	x 6.02 x 10 ²³
2 mol	1 mol	2 mol
x 23.0 g/mol	x 71.0 g/mol	x 58.5 g/mol
46.0 g	71.0 g	117.0 g

Linear Steps for Stoich



p.116 #61

Na +
$$O_2 \rightarrow Na_2O$$

- a) How many moles of Na₂O can be formed from 10.0 mol Na (with excess O₂)?
- b) How many moles of O₂ would be needed to produce 83 mol Na₂O?
- c) How many grams of O₂ are needed to react with 10.0 mol Na?
- d) How many moles of Na₂O can be produced from 4.28 g O₂?
- e) How many grams of O₂ are needed to react with 3.57 g Na?