

OCR (B) Chemistry A-Level

DF1 - Formulae, Equations and Amount of Substance

Flashcards

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What is the ideal gas equation?



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$$pV = nRT$$

p = pressure in Pa

V = volume in m^3

n = number of moles, in mol

R = gas constant, $8.314 \text{ J mol}^{-1} \text{ K}^{-1}$

T = temperature, in K



How can you predict the yield of a reaction?



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- Work out the number of moles of a reactant you have used, for 2g of sodium: $2/23 = 0.087$ mol.
- Multiply by the ratio between the chosen reactant and product: $0.087 \times 0.5 = 0.044$ mol.
- Multiply by the Mr of the product: $0.044 \times 62 = 2.73\text{g}$.

