Worksheet: Thermodynamics

IGCSE · Class 11 · Chemistry · 5 questions · 15 marks

Name: _____ Date: _____ Score: _____ / 15

Q1. Is bond breaking endothermic or exothermic, and what about bond formation? *[2 marks]*

Q2. What is the significance of delta-G = 0? *[2 marks]*

Q3. For N2 + 3H2 -> 2NH3, delta-H = -92.4 kJ at 298 K. Find delta-U given delta-n_g = -2. *[3 marks]*

Q4. For a reaction delta-H = 30 kJ and delta-S = 100 J/K. Find the temperature above which it becomes spontaneous. *[3 marks]*

Q5. Calculate delta-fH of C2H6 given delta-cH(C) = -393.5, delta-fH(H2O) = -285.8, and delta-cH(C2H6) = -1560 kJ/mol. *[5 marks]*