

Summary for Test 2

Heat Conduction, Diffusion: microscopic picture

Multiplicities:

systems: 2-state (paramagnet), Einstein solid, ideal gas (& similar)

list microstates; derive Ω , Ω_{tot} ; apply Stirling formula and $\ln(1+x) \approx x$, know EXCEL commands; derive width of Ω_{tot} and know significance of sharp peak

NOT on Test 2: **Entropy:** $S = k \ln \Omega$ determine S , ΔS

2nd Law of Thermodynamics: major concept