**Useful equations and constants**

*n*1*l*1=*n*2*l*2

*m*loss=(rate of effusion)\**t*\**m*=(rate of effusion)\**t*\**M*/*N*A; (rate of effusion)=

*R*=8.314 J K-1 mol-1

*k*=1.381\*10-23 J K-1