
Equations and Constants for Quiz #3

The following equations and constants will be given on Quiz #3. If you don't see something here, then you should commit it to memory.

Equations:

Edge lengths: $2r$ $2\sqrt{2}r$ $\frac{4r}{\sqrt{3}}$

$$E = T \times 8.6 \times 10^{-5} \frac{\text{eV}}{\text{K}} \qquad 2\text{eV} = \frac{10^6 \text{V}}{\text{cm of material}}$$

Constants:

Planck's constant (h) = 6.626×10^{-34} J·s

Speed of light (c) = 3.00×10^8 m s⁻¹

Avogadro's number (N_A) = 6.022×10^{23} mole⁻¹

Mass of electron (m_e) = 9.11×10^{-31} kg

1eV = 1.602×10^{-19} J