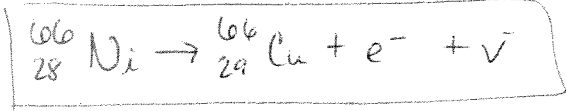


P #32

Ch 29 - pg 929



By conservation of charge, a negative β particle (e^{-}) is emitted so $28 = 29 + -1$

For a complete β decay reaction, an antineutrino is also emitted

b) $m_{\text{Ni}} = 65.9291 \text{ u}$

$m_{\text{Cu}} = 65.9289 \text{ u}$

$E = \Delta m \cdot c^2$

$= (65.9291 \text{ u} - 65.9289 \text{ u}) \cdot \frac{(931 \text{ MeV})}{c^2} \cdot c^2$

$E = 186,200 \text{ eV}$