

P #J

Ch 28 - Worksheet

c) For Paschen series, e^- falls to $n=3$

$$\text{Smallest } \Delta E = E_4 \text{ to } E_3 = (-1.51 \text{ eV}) - (-0.85 \text{ eV})$$

$$\Delta E = 0.66 \text{ eV}$$

$$E = \frac{h \cdot c}{\lambda}$$

$$0.66 \text{ eV} = \frac{1240 \text{ eV} \cdot \text{nm}}{\lambda}$$

$$\lambda = 1876 \text{ nm}$$