## Quiz 29.1A

Light with a wavelength of 422 nm illuminates a metal surface. Electrons are observed to escape from this surface with a maximum velocity of $7.25 \times 10^{5} \mathrm{~m} / \mathrm{s}$.
a) What is the maximum wavelength photon necessary in order for electrons to escape the metal?
b) If the wavelength of light is cut in half to 211 nm , what is the resulting maximum velocity of the escaping electrons?

