

Photoelectric Effect Problem

Name: _____ Date: _____

1. Draw a schematic of photons hitting a flat metal surface and represent photoelectrons being emitted.
2. Explain what the threshold frequency represents as related to the photoelectric effect.
3. Explain why the intensity of the light does not affect the cut-on or threshold frequency.
4. Photons (Light) with a wavelength of 194 nm is incident on a metal surface. The ejected electrons have a kinetic energy of 3.5 eV. Calculate the work function of the metal in eV. State the metal that this corresponds to (bit.ly/1lbbuvV).