

Download the applet on the photoelectric effect from  
[http://phet.colorado.edu/simulations/sims.php?sim=Photoelectric\\_Effect](http://phet.colorado.edu/simulations/sims.php?sim=Photoelectric_Effect)

Turn up the intensity to 100%.

Draw a graph that represents the number of electrons emitted as a function of wavelength of light illuminating the target. (change the wavelength with the slider)

What, in your graph, stays constant and what changes when you alter the intensity of the light?

What conclusions about the nature of light can be drawn from your observations?

How does altering the chemical nature of the target alter your graph of the relationship between photons emitted and the wavelength of the illuminating light?