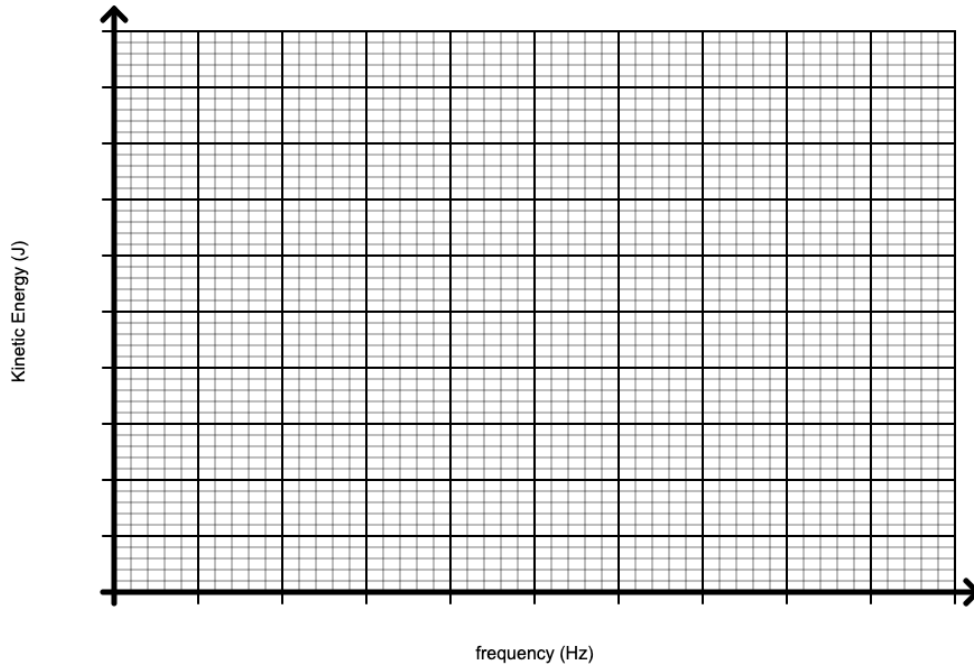


# Photoelectric Effect Problem

Step 1: Measure the minimum voltage that is able to stop electrons from reaching the left hand plate for five different wavelengths. For each trial, calculate the frequency of the light and the KE of the electrons that were stopped by the voltage. Put your information in the chart below

Wavelength (nm)	Frequency (Hz)	Stopping Voltage (V)	Kinetic Energy (J)

Step 2: Use a graphing program or graph by hand. The kinetic energy should be on the y-axis and the frequency is on the x-axis. Either way, complete the graph below



Step 3: The y-intercept will allow you to find the work function of your material. As graphed, the absolute value of the y-intercept is your work function in Joules. Just convert it from Joules to eV and enter it into the answer box and you should be good