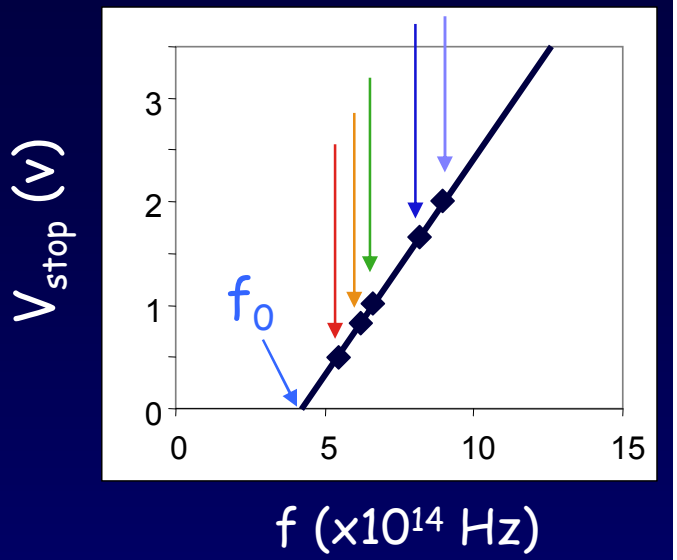
Act 1

1. If the workfunction of the material increased, how would the graph change?
   a. Increased slope
   b. Increased f_o
   c. Both a and b



The y intercept moves down, so the slope is unchanged and f_0 increases → the photons need more energy to be able to free the electrons from the increased binding.

2. We now shine on light with frequency $2f_0$. What effect does doubling the intensity (i.e., the power) of the incident light have on the current of emitted electrons?
   a. doubles
   b. stays the same
   c. decreases