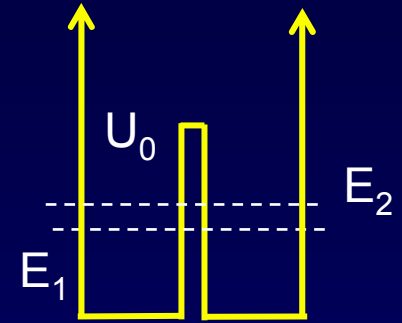


Act 2

You are trying to make a laser that emits violet light ($\lambda = 400 \text{ nm}$), based on the transition an electron makes between the ground and first-excited state of a double quantum well as shown. Your first sample emitted at $\lambda = 390 \text{ nm}$.



What could you modify to shift the wavelength to 400 nm?

- a. decrease the height of the barrier
- b. increase the height of the barrier
- c. decrease the width of the barrier