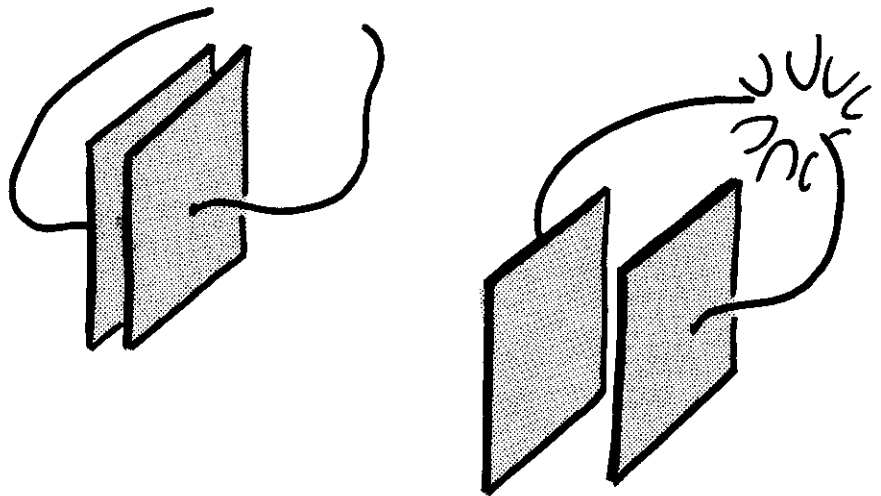


## ENERGY IN A CAPACITOR

Consider a simple capacitor made of a pair of conducting plates in close proximity. Suppose the plates are appropriately charged  $+$  and  $-$  and then discharged to produce a spark. Next, the plates are charged again exactly as they previously were, only this time after being charged they are pulled farther apart. If they are then shorted out a second time, the spark produced will be



- a) bigger (liberate more energy) than the first spark
- b) smaller than the first spark
- c) the same size as the first spark