

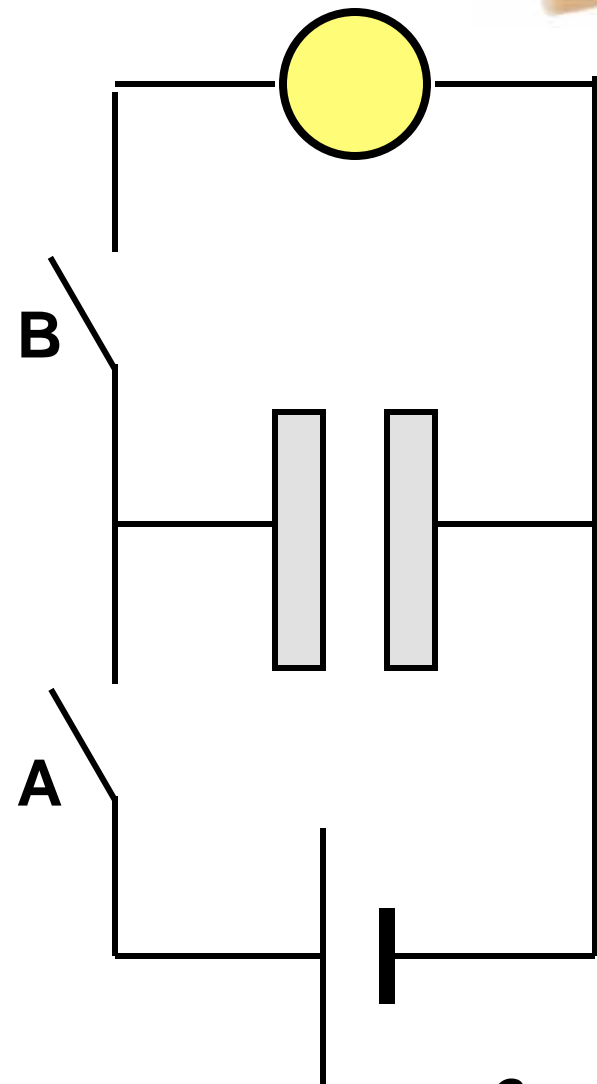


■ Suppose we:

- Close A for a few seconds
- Open A
- Close B

■ What happens to the bulb?

- 1. It stays off.
- 2. It stays on after you close A
- 3. It stays on after you close B
- 4. It flashes when you close A
- 5. It flashes when you open A
- 6. It flashes when you close B

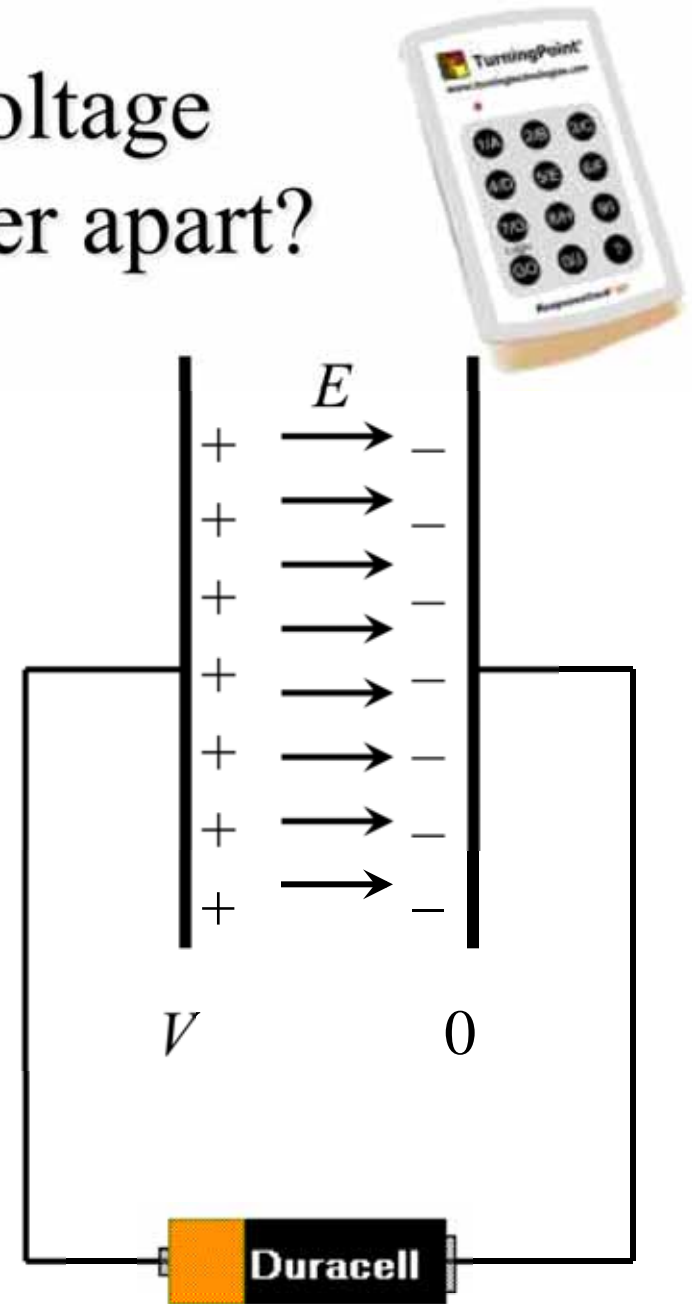


# What would happen to the voltage if you pulled the plates further apart?

1. The potential difference would increase.
2. The potential difference would decrease.
3. The potential difference would stay the same.

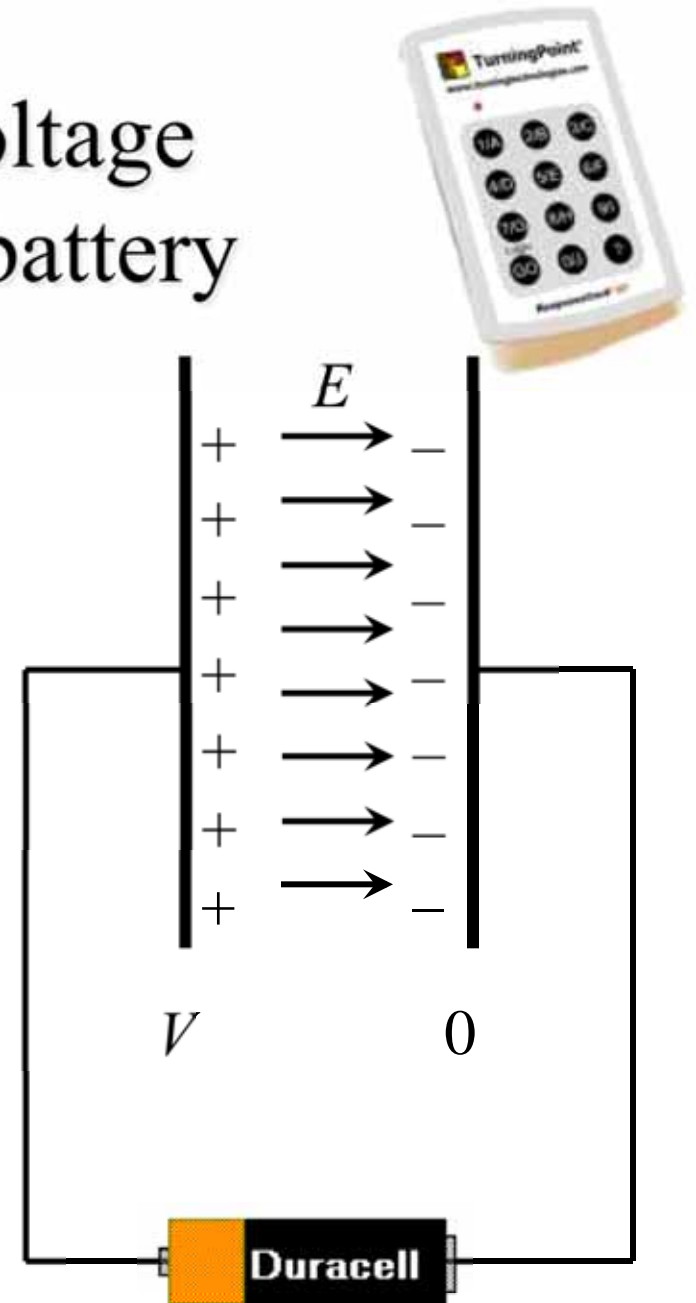
Does the battery do any work moving charges when you move the plates?

1. Yes
2. No



What would happen to the voltage if you first disconnected the battery and then pulled the plates further apart?

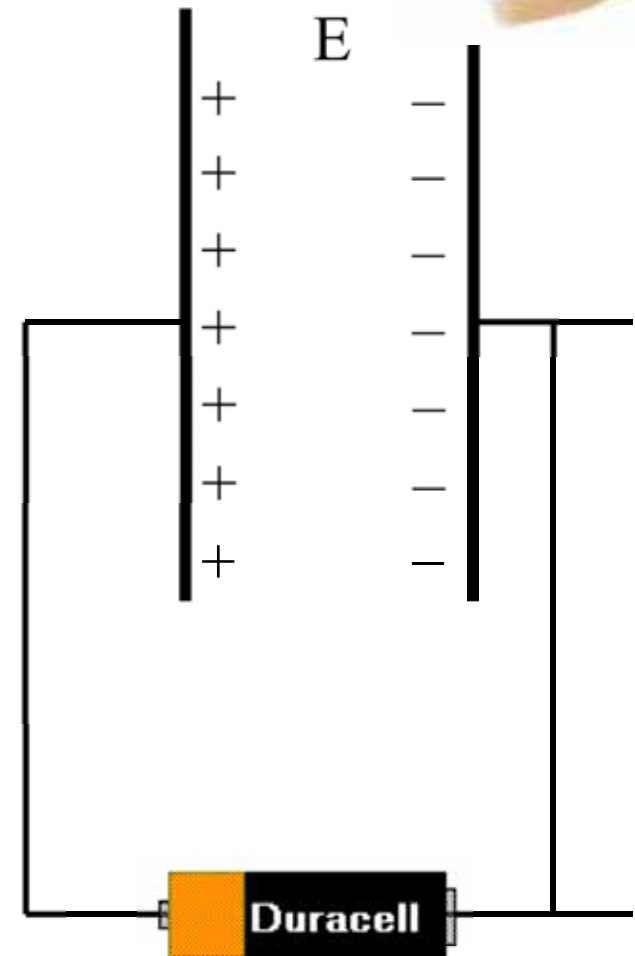
1. The potential difference would increase.
2. The potential difference would decrease.
3. The potential difference would stay the same.





What will happen to the potential difference across the capacitor plates if:

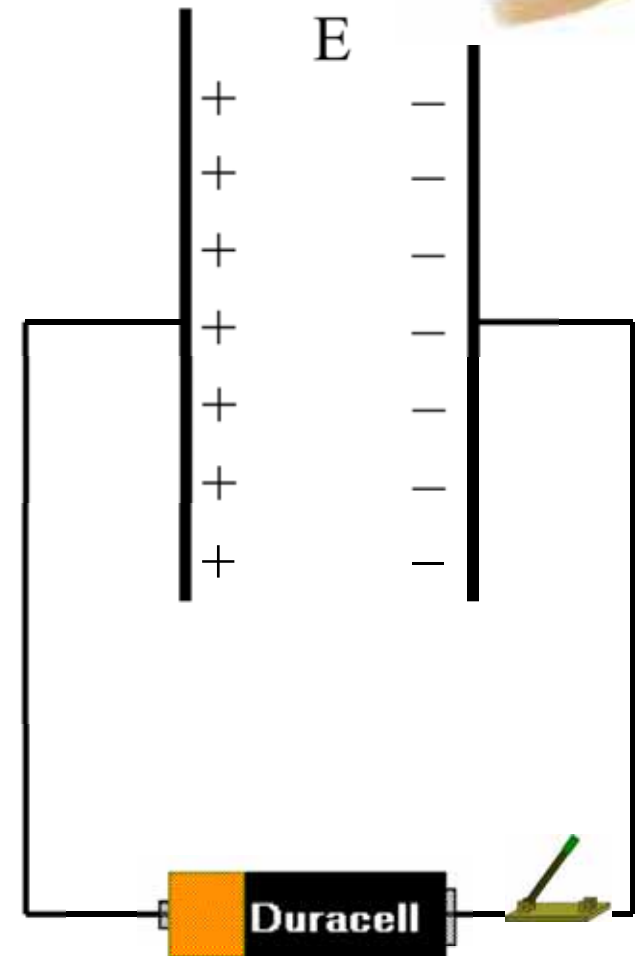
- I keep them connected to the battery (power source) and slowly move the plates apart.
- It should
  - 1. get larger
  - 2. stay the same
  - 3. get smaller.





What will happen to the potential difference across the capacitor plates if:

- I disconnect them from the battery (power source) and slowly move the plates apart.
- It should
  - 1. get larger
  - 2. stay the same
  - 3. get smaller.



A white, handheld electronic device with a keypad. The keypad has buttons labeled 1/A, 2/B, 3/C, 4/D, 5/E, 6/F, 7/G, 8/H, 9/I, 0/J, and a power button. The device has a small screen at the top displaying the TurnPoint logo and the website address www.turnpointtechnologies.com. The device is shown at an angle, highlighting its slim profile.

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What will happen to the capacitance ( $C$ ) of a capacitor if:

- I double the distance between the plates
- It should
  - 1. double
  - 2. stay the same
  - 3. half
  - 4. some other change
  - 5. You can't tell from the information given.

