## Quiz3, 10 min. <a href="http://www.socrative.com/">http://www.socrative.com/</a>, room EM1304, enter your ID

- 1. Electric field lines go from
  - A. high to low electric potential energy
  - B. high to low electric potential
  - C. low to high electric potential energy
  - D. low to high electric potential
- 2. An electron moved by electric field force through 1 Megavolt potential difference will
  - A. gain about 1.6x10<sup>-13</sup> J of kinetic energy
  - B. lose about 1.6x10<sup>-13</sup> J of kinetic energy
  - C. gain about 1.6x10<sup>-13</sup> J of potential energy
  - D. have 1.6 mega-electron-volt kinetic energy
- 3. Capacitors are
  - A. conductors to transmit electric potential energy.
  - B. made of dielectric materials
  - C. devices that store electric charges
  - D. spheres
- 4. The electric potential energy stored in a capacitor is
  - A. proportional to the potential difference between the two plates
  - B. proportional to the square of the potential difference between the two plates
  - C. proportional to the charge the capacitor holds
  - D. proportional to the square of the capacitance of the capacitor