

- 1) A proton and an electron are in a constant electric field created by oppositely charged plates. You release the proton from the positive side and the electron from the negative side. Which feels the larger electric force? Explain your reasoning.
- a) proton
  - b) electron
  - c) both feel the same force
  - d) neither - there is no force
  - e) They feel the same magnitude force but opposite direction
- 2) A proton and an electron are in a constant electric field created by oppositely charged plates. You release the proton from the positive side and the electron from the negative side. Which has the larger acceleration? Explain your reasoning.
- a) proton
  - b) electron
  - c) both have the same acceleration
  - d) neither - there is no acceleration
  - e) They have the same acceleration just in opposite direction.
- 3) A proton and an electron are in a constant electric field created by oppositely charged plates. You release the proton from the positive side and the electron from the negative side. When it strikes the opposite plate, which one has more Kinetic Energy (KE)?
- a) proton
  - b) electron
  - c) both have the same Kinetic Energy (KE)
  - d) neither - there is no change in KE
  - e) They both acquire the same KE but with opposite signs