

ELECTRON SPEED

When you turn the ignition key in an automobile, you complete a circuit from the negative battery terminal through the electric starter and back to the positive battery terminal. This is a DC circuit and electrons migrate through the circuit in a direction from the negative battery terminal to the positive terminal. About how long must the key be in the ON position for electrons starting from the negative terminal to reach the positive terminal?

- a) A time shorter than that of the human reflex turning a switch on or off
- b) $\frac{1}{4}$ second
- c) 4 seconds
- d) 4 minutes
- e) 4 hours

