

- 34** The sum of the electrical currents into a point in a circuit is equal to the sum of the currents out of the point.

Which statement is correct?

- A** This is Kirchhoff's first law, which results from the conservation of charge.
- B** This is Kirchhoff's first law, which results from the conservation of energy.
- C** This is Kirchhoff's second law, which results from the conservation of charge.
- D** This is Kirchhoff's second law, which results from the conservation of energy.

- 35** A battery of voltage $V = 5.0\text{ V}$ is connected in series with a light bulb and a resistor in a circuit.