

WORLD OF WIRES

ANSWER KEY

- 1 Large birds' wings can contact two power lines at the same time, creating a short circuit for electricity to flow through them. The same thing can happen if they contact a power line and power pole at the same time. Small birds do not contact anything but the power line they sit on, and so electricity stays in the line rather than flowing through them.
- 2 To prevent condors from dying when they land on a power pole, aversion training teaches birds that will someday be released from captivity to avoid them. In aversion training, the birds get a small shock when they land on a simulated power pole.
- 3 A circuit is a loop for electricity to travel on.
- 4 Electromagnetic induction is the use of magnets to generate electric current in a wire.
- 5 Electromagnetic induction involves giant coils of wire being moved past magnets. The pull of the magnets causes the electrons in the metal wire to move, creating electricity.
- 6 Answers will vary. Precautions should focus on keeping all tools and equipment at least 10 feet away from any power line, including the line that leads from the power pole to the home.