Key Concept 1: Electricity flows in a closed path called a circuit and stops when the circuit is broken.

Passage

Electricity is a form of ______________ produced when electrons move along a path. These electrons must travel along a ______________, or complete circuit through a special material that _____________ electricity, allowing it to flow. If we cause a gap to form in this pathway the electricity will ____________, which prevents the _____________ or movement of current. Think about all the devices at home and at school that use ______________. When we turn the lights on and off, for example, using a ______________, we cause the formation of a complete and incomplete circuit!

Word Bank

switch  flow  conducts  path  stop  electricity  energy

Illustration
Key Concept 2: We can demonstrate that electricity can produce light, heat, and sound when flowing through a circuit.

Passage

There are plenty of items we depend on and enjoy having that use electricity. This electricity is ____________, or transformed, into other forms of energy in these devices. The television transforms electricity into ___________ energy since we can see the picture, and ___________ energy since we can hear it. When the toaster is turned on, it produces ___________ energy since it toasts our bread. All of these things only happen when the circuit is complete, which means electricity can ___________.

Word Bank

light    flow    sound    changed    thermal/heat

Illustration
Key Concept 3: Many everyday devices use electricity to produce light, heat, and sound.

Some devices, such as our doorbell, mainly produce ____________ energy when they are operated. Other devices like lamps use electricity to produce_____________ energy since we can see the results in a dark room. Are some of your favorite devices dependent on the use of electricity? If so, they are likely transforming electrical energy into other forms, such as ____________, ____________, or ______________. Which is the most useful for you? Do you prefer one form of energy over another? Think about the forms of energy you use each and every day.

Word Bank

| light | sound | light | heat | sound |

Illustration
Electricity is a form of energy produced when electrons move along a path. These electrons must travel along a path, or complete circuit through a special material that conducts electricity, allowing it to flow. If we cause a gap to form in this pathway the electricity will stop, which prevents the flow or movement of current. Think about all the devices at home and at school that use electricity. When we turn the lights on and off, for example, using a switch, we cause the formation of a complete and incomplete circuit!

There are plenty of items we depend on and enjoy having that use electricity. This electricity is changed, or transformed, into other forms of energy in these devices. The television transforms electricity into light energy since we can see the picture, and sound energy since we can hear it. When the toaster is turned on, it produces thermal/heat energy since it toasts our bread. All of these things only happen when the circuit is complete, which means electricity can flow.

Some devices, such as our doorbell, mainly produce sound energy when they are operated. Other devices like lamps use electricity to produce light energy since we can see the results in a dark room. Are some of your favorite devices dependent on the use of electricity? If so, they are likely transforming electrical energy into other forms, such as heat, sound, or light. Which is the most useful for you? Do you prefer one form of energy over another? Think about the forms of energy you use each and every day.