



Hack a Greeting Card

Learn about Electricity Circuits

INTRO

Did you know? A circuit is the path along which electricity travels. When all parts of the circuit are connected, electricity flows. A break anywhere in the circuit stops electricity flowing. In one position, the switch breaks the circuit. When that happens, the electricity stops flowing, and there's no music. In the other position, the switch completes the circuit. When you connect a circuit in a musical greeting card, the electricity flows, and music blasts!

SUPPLIES

- Musical Greeting Card
- Scissors
- Tape
- String
- Hiding Place

VOCAB

- Electricity
- Circuit
- Switch

INSTRUCTIONS

1. Find the electronics: Remove the part of the card covering the electronics. Cut off the cover: Cut open the inside cover of the greeting card to expose the circuitry.
2. Cut out the electronics: Draw a line around the electronics. Include the tab on the other side of the card. This tab controls the switch that turns the song on and off. Cut the line. Make the song start and stop by moving the tab back and forth. This opens and closes the circuit. Look closely to figure out how the switch works. Find the battery and the speaker. Look closely to figure out how the switch works. Find the battery and the speaker.
3. Add a pull-string: Tape a string to the tab. Test the string by pulling it to open the switch. Did the music start? If not, check that nothing is blocking the switch.
4. Tape your card in a secret place: Try something with a lid, like a lunch box, or cookie jar. Or find something that opens, like a locker, cabinet, or refrigerator door. Tape the card in place.
5. Tape the string: Tape the string so that when the jar or door opens, it gets pulled. This will open the switch.
6. Set the trap: Once someone opens where your trap was placed the switch will open and the music will begin.

DISCUSS

- How else can you get the music to play? Here's a suggestion: Wear it! Mount your hacked greeting card to a band that you can wear on your arm or leg or under your hat. Attach a long string to the switch. Secure the card to your arm, leg, etc. Then put on something that fits loosely, like sweat pants or a sweatshirt. Run the string through the garment so you can grab the end. When you want the music to blast, pull the string to open the switch.