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Secret Candy Safe

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An alarming way to keep your secrets safe!

Materials Needed

- cardboard boxes with lids
- copper wire
- batteries
- buzzers
- string
- aluminum foil
- paper clips
- mini slinkys
- markers
- masking tape
- electrical tape
- scissors
- your secret stash of Halloween candy

Instructions

1. To keep your family members from munching on your secret stash of Halloween candy, build a safe with an alarm.
2. Use a cardboard box, a battery, a buzzer and any of the above materials to make your safe.
3. Think about what problem you are trying to solve. How will you get the buzzer to go on when someone opens the box? For the buzzer to sound, it has to be connected to the battery by wires. How can you make two wires touch when the box is open that don't touch when it's closed? How will you keep the alarm from going off if you want to get into your safe? Check out the [ZOOMsci Door Alarm](#) for more ideas on how build a circuit with a switch.
4. Test your design. If it doesn't work make changes to your design and try again.

Trace the flow of electricity through your alarm circuit. Did you build a complete circuit into your design? In a complete circuit, the electricity from the battery flows along one wire to the buzzer, along the other wire and then back to the battery. The moving electricity makes the buzzer sound. If you disconnect one wire, the electricity stops moving because you broke the circuit. How does your switch interrupt the flow of energy to stop the alarm?

What if you had something you wanted to protect that couldn't fit in your safe? What would you need to put an alarm on a drawer or a closet? Test it out and be sure to [send your designs to ZOOM](#).

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