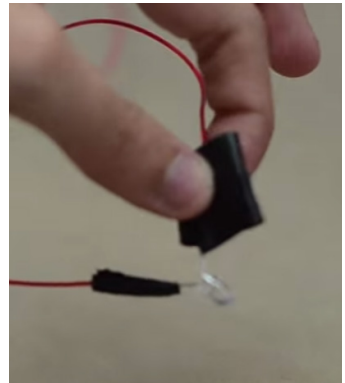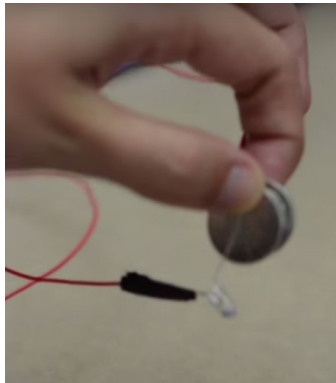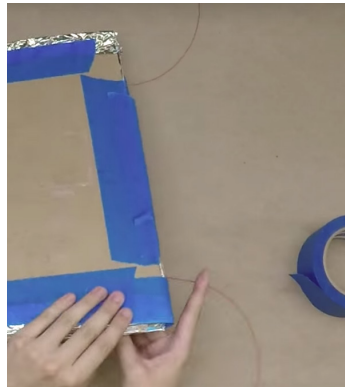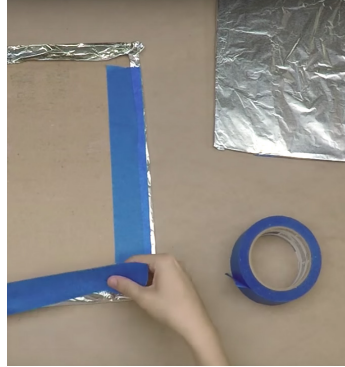# Pressure Plate

1. Prepare the cardboard.
Make sure the three pieces of cardboard are the same size. » Cut the center out from one piece leaving at least a one inch border. » Line one side of another piece with aluminum foil and use the masking tape to secure it to the cardboard. » Repeat the previous step by lining the remaining piece of cardboard with foil. » Sandwich the three pieces together so that the cut piece is between the two sides with foil.

2. Add the wires.
Before securing the three pieces of cardboard together, cut two ten inch pieces of hook-up wire and strip one inch of insulation off all four ends. » Tape one wire to one side of cardboard that has foil on it so that the exposed wire is making contact with the foil. » Repeat this step with the other wire and the other piece of cardboard that has foil. » Now secure all three pieces of cardboard together with tape.

3. Build your circuit.
Take one of the wires that you just attached and secure the other end to the negative pin on an LED using electric tape. » Now stack the coincell batteries so that the positive end touches the negative end. Tape the positve pin on the LED to the positive side of the battery stack. » Complete the circuit by attaching the remaining pressure plate wire to the negative side of the battery stack. Secure everything with tape.

4. Test your pressure plate!
Press down onto the cardboard to make the two aluminum foil sides make contact and complete your circuit! The LED should light up when you press down.

Supplies

3 pieces of cardboard

Aluminum foil

Masking tape

Insulated hook-up wire

Wire strippers

2 coin cell batteries

LED

Ghost

1. Create the shape.

Using the craft knife, cut a small hole into the ping pong ball. An LED should be able to fit inside the hole. » Next, wrap the tissue paper around the ghost leaving the hole still exposed. » Loosely secure the tissue paper to the ping pong ball using the rubberband.

2. Finish your ghost!

Give your ghost a face and then vvvtest it out with your new pressure plate. » Place the LED inside the hole that you cut into the ping pong ball and light up your ghost!

Supplies

Ping pong ball

Craft knife

Tissue paper

Rubber band

Marker

Ghost Booby Trap

1. Suspend the ghost.

Measure out enough hook-up wire to span from floor to ceiling, then double it and cut it. Repeat this step with a second piece of wire. » Connect the two wires to the two pins on the LED. Remember which wire is on the negative pin and which is on the positive pin! » Now use the wires to suspend the ghost from the ceiling and run the remaining wire down the doorframe and to the pressure plate on the floor.
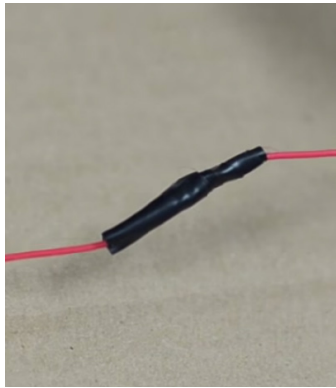
2. Connect the ghost to the pressure plate.

Connect the wire that is attached to the negative pin on the LED to one of the wires sticking out of the pressure plate. » Connect the other wire that is sticking out of the pressure plate to the negative end of the battery stack. » Connect the wire that is attached to the positive pin on the LED to the positive side of the battery stack. » Tightly secure everything with electric tape.
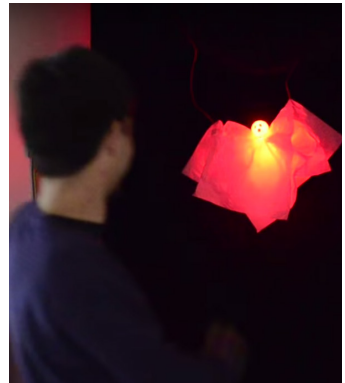
3. Test your booby trap!

Tape down any loose wires and throw a rug over your pressure plate. » Now step on the rug to light up your ghost!v

Supplies

Pressure plate

Ghost

Hook-up wire

Optional: rug