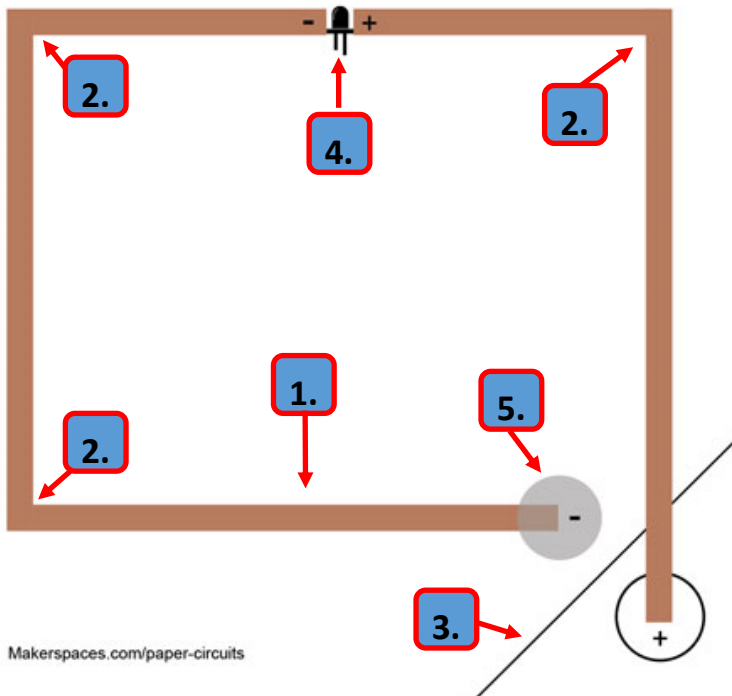


SIMPLE PAPER CIRCUIT:

Practice making a circuit using a template



MATERIALS:

- Copper Tape
- Coin Battery
- LED
- Paperclip (Optional)
- Simple Circuit template

TOOLS:

- Scissors
- Clear Tape

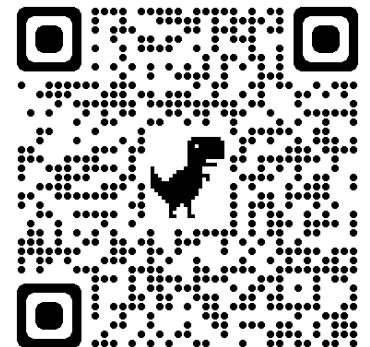
This activity was adapted from Makerspaces.com

- 1.** Apply the copper tape to the trace lines marked in grey on the Simple Circuit template. It is best to maintain a continuous strip of tape versus cutting it. (To make the tape sticky, gently remove the white paper on the back.) Gently push down on the tape to make sure it is firmly attached to the paper. When handling the tape, try to not crease it.
- 2.** At the corners, fold the tape at a 45° angle in the opposite direction of where you are going. Then, with your finger, make a crease and fold it back at a 180° angle and continue to apply. Make sure to leave a gap in the tape where the LED is to be mounted. If working with a continuous strip is too difficult, cut smaller pieces and make sure to overlap the edges.
- 3.** On the bottom of the Simple Circuit template, accurately fold the bottom right corner along the line. It's important that the circle with the (-) lines up with the circle with the (+). Firmly press along the fold to make the crease deep and sharp.
- 4.** Mount the LED to the copper tape. To do this, bend both legs of the LED at a 90° angle and then tape the legs down securely with clear tape. Make sure that the long leg of the LED goes to the positive (+) side of the copper tape.
- 5.** The last step is to place the coin-cell battery on top of the copper tape. Make sure the battery (-) is facing down. The corner flap which is (+) should then be able to contact the battery (+) when folded and light up the LED.

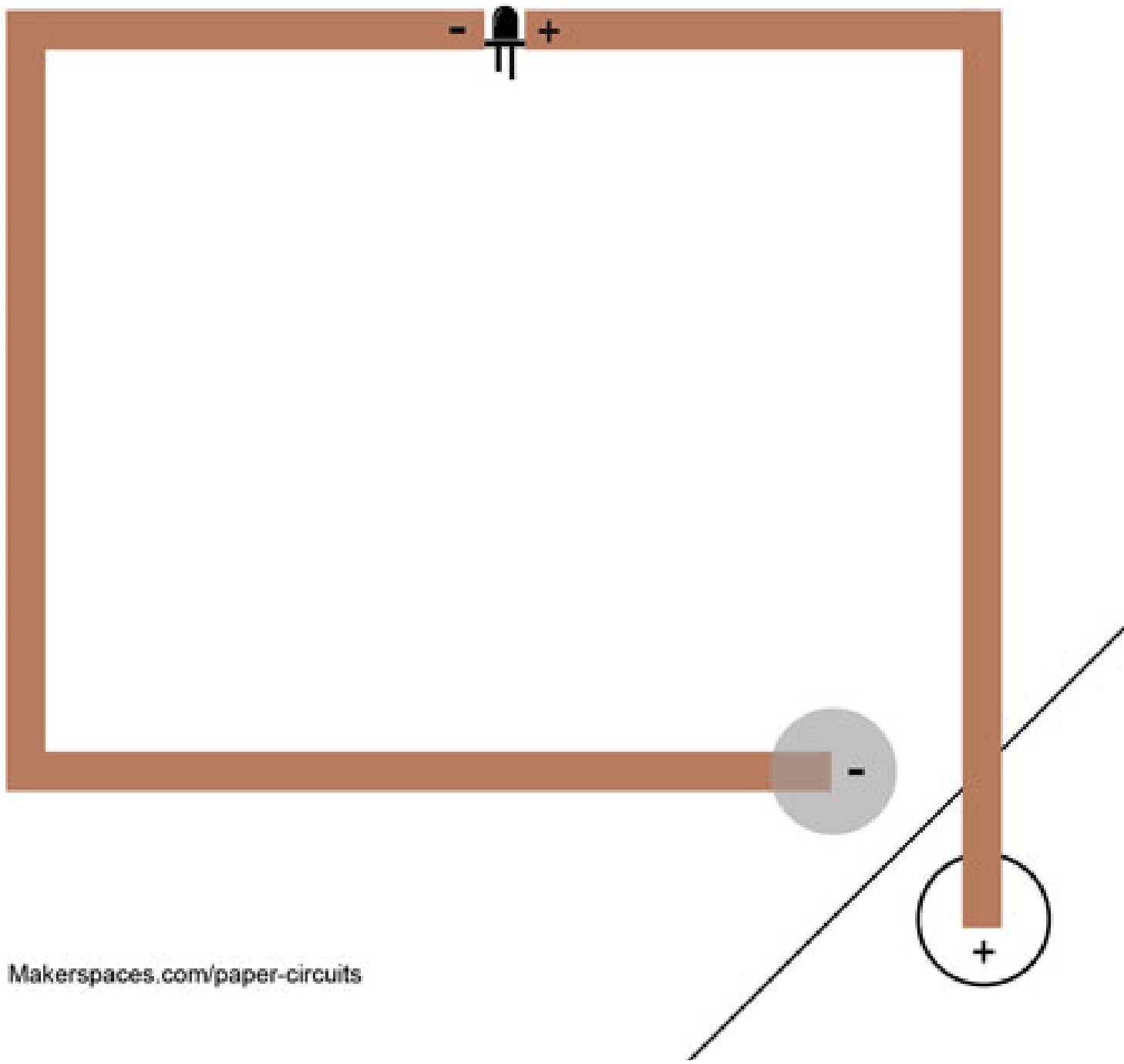
Optional – Secure the corner flap using a paper clip or binder clip.

Using the camera on a cellphone scan this QR code to access more resources on circuits!

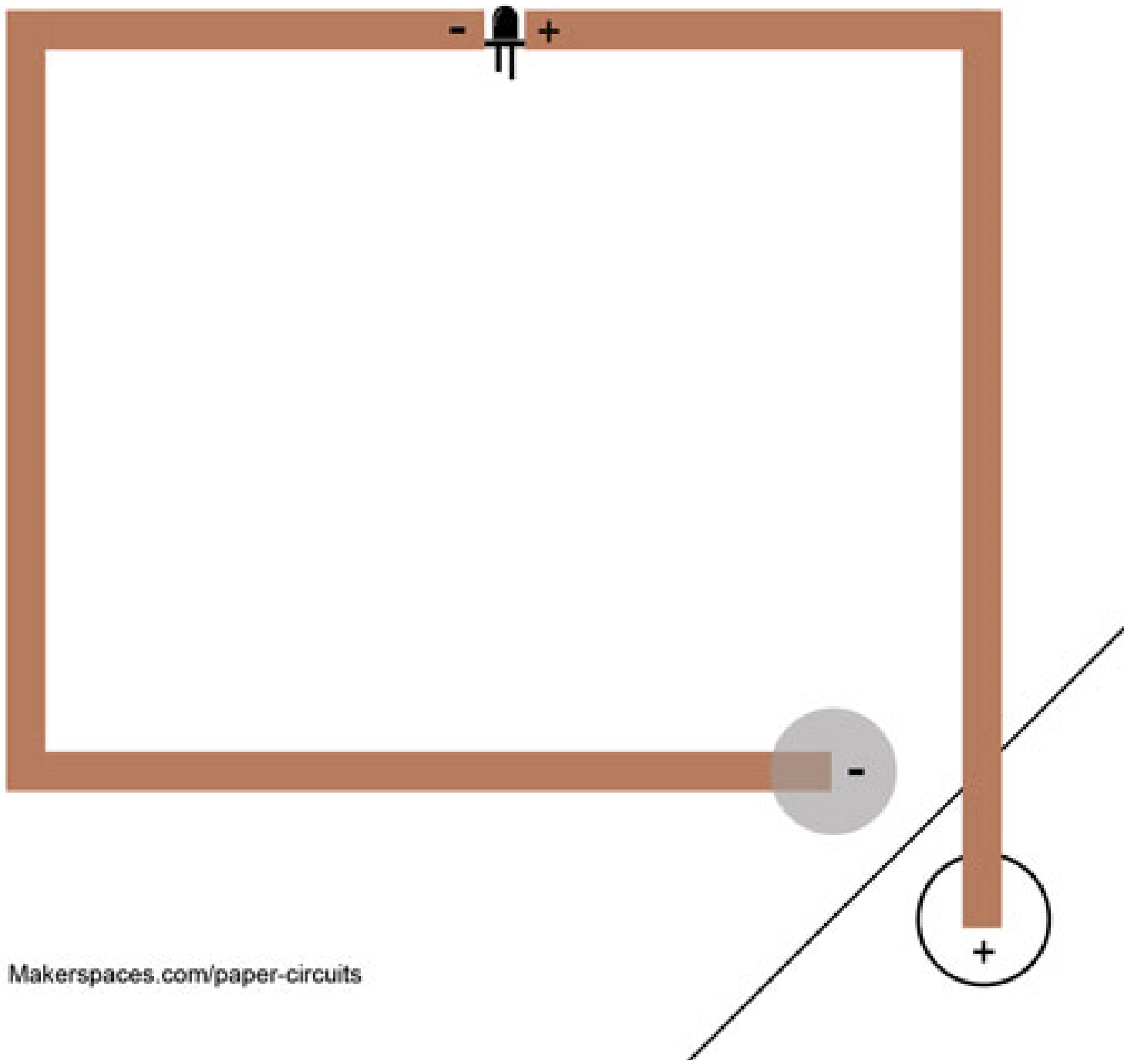
<https://www.sunprairiepubliclibrary.org/stem-bag>



Simple Circuit



Simple Circuit



Simple Circuit

