Circuit Board Instructions

Materials Needed

- Notecards or file folders*
- Aluminum Foil
- Tape

- Wires
- Battery
- Light bulbs

*Students can make circuit boards on note cards or file folders.

On a notecard:

- 1. Have students write a question along with 3-4 possible answers on the notecard.
- 2. Using a hole punch, students punch a hole next to the question and each answer choice.
- 3. On the back of the notecard, students tape an aluminum foil strip starting from the hole at the question and ending at the hole next to the correct answer.
- 4. Students tape a small piece of foil over the other holes next to the incorrect answer choices.

On a file folder:

- 1. Students put 3-4 problems/questions down one side of the file folder and the answers to those problems (mixed up) down the other side.
- 2. Using a hole punch, students punch holes by each question and answer.
- 3. Students place foil strips starting at each question and leading to that question's correct answer. Be sure the foil strips do not touch or cross over each other!

Once students have completed the above steps using a notecard or a file folder, students use wires, a battery, and a light bulb to construct a circuit (leaving two wires unconnected). When students touch the unconnected wires to foil next to the question and correct answer, the light bulb illuminates since the circuit is complete.

For more detailed instructions, please visit this website: <u>http://www.msichicago.org/online-science/activities/activities/make-a-circuit-board/browseactivities/8/</u>