

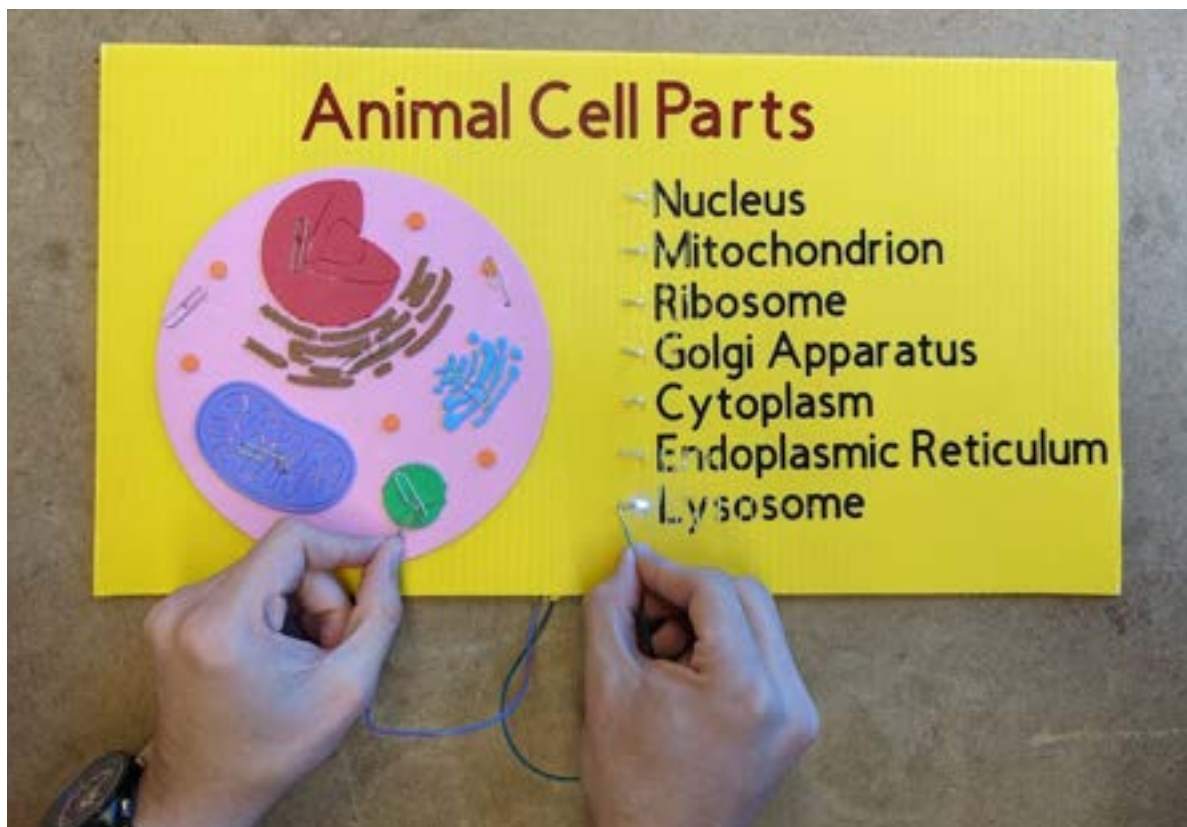
LED Quiz Boards

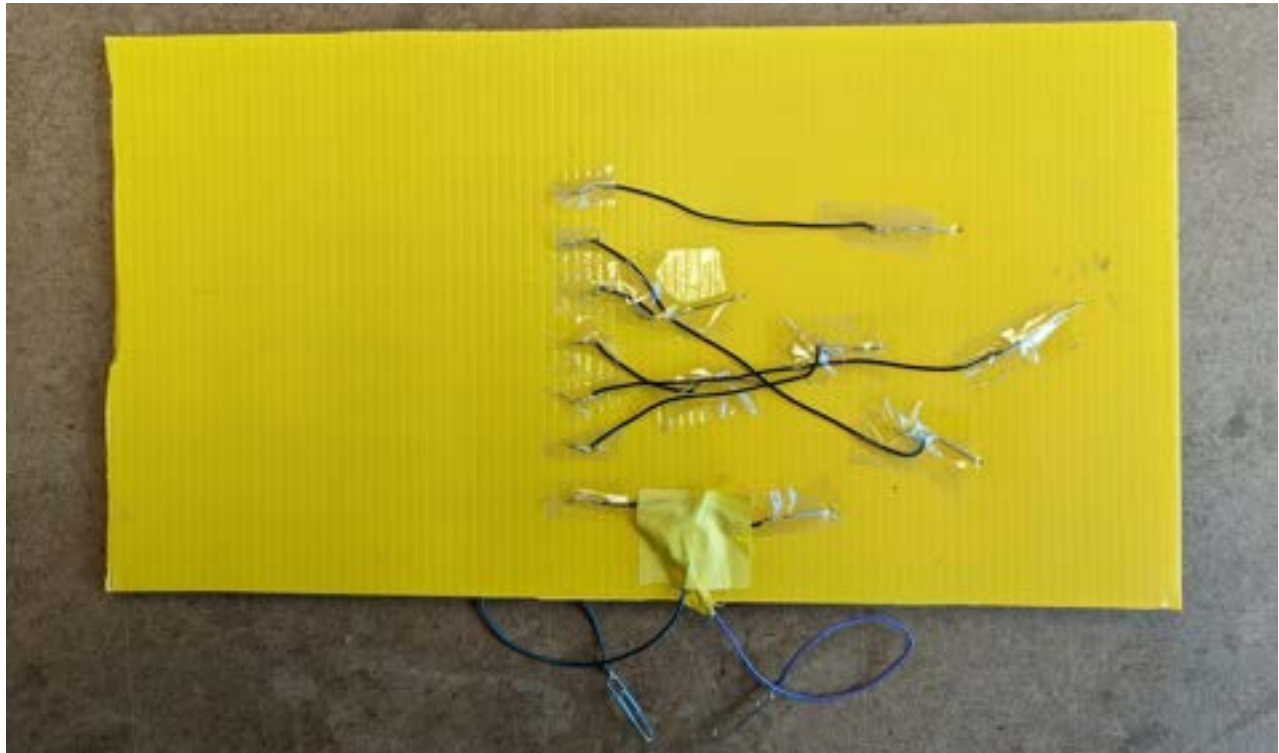
Specialized tools/technology used:	Experience level required:
basic craft tools and supplies Craft Cutter (Cricut, Silhouette, etc) LEDs, wire, wire strippers, coin-cell batteries	beginner

Grade Level (of this example): 3 - 8

Topic/Content Standards (for this example): Life Science

Summary of Project: Students create electronic quizzes and matching games using LEDs, wires, a 3V coin battery and paper clips. In this example, students create quiz boards for plant or animal cells using a craft cutter to make labels as well as organelles cut from sheets of craft foam. The board and diagrams/labels can be made from any sheet material- foam core, cardboard, etc. The boards are made **without soldering** - wires are twisted around the LEDs or paper clips to create connections which are secured and insulated with tape!





Battery is under the yellow tape with wires connecting the paper clip probes to the positive and negative sides. The wires connect one leg of each LED to the corresponding point on the diagram.

Possible Content Extensions

- **ELA:** students match vocabulary words to their parts of speech or definitions
- **History:** US government – students match officials (mayor, governor, Secretary of Commerce) with their level of government – city, state, national.
- **History:** Innovative technology from history - labeling parts (pictured, right)
- **Math** Venn diagrams – students need to match items from sets with their correct places in the diagram.

