

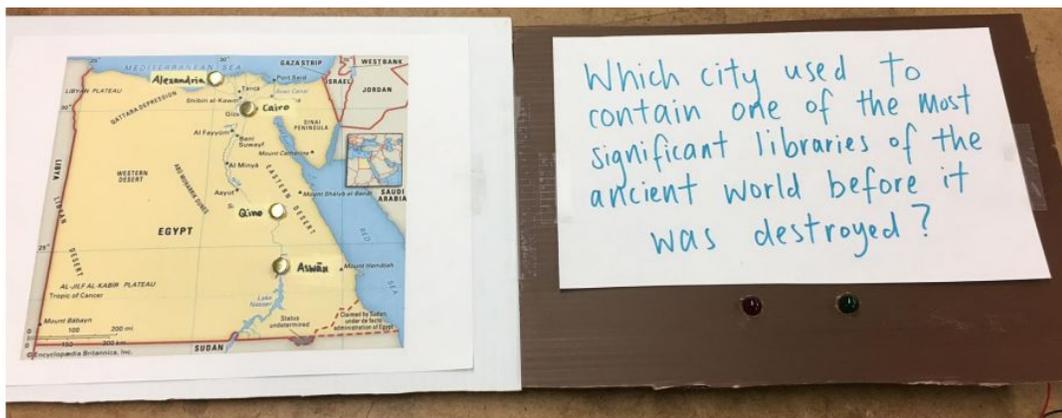
Electric Quiz Board

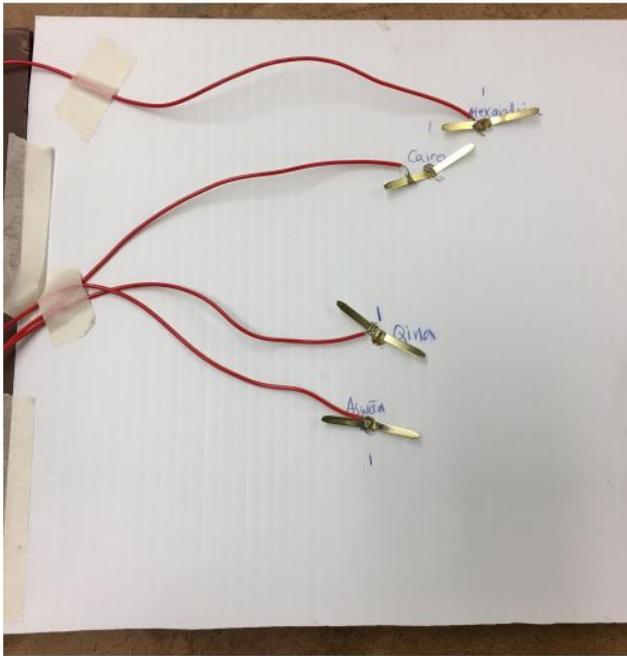
Specialized tools/technology used:	Experience level required:
Bass pins/paper fasteners, wires, lightbulbs or LEDs, battery packs, buzzers (optional), cardboard, printed maps	

Grade Level (of this example): 6-8

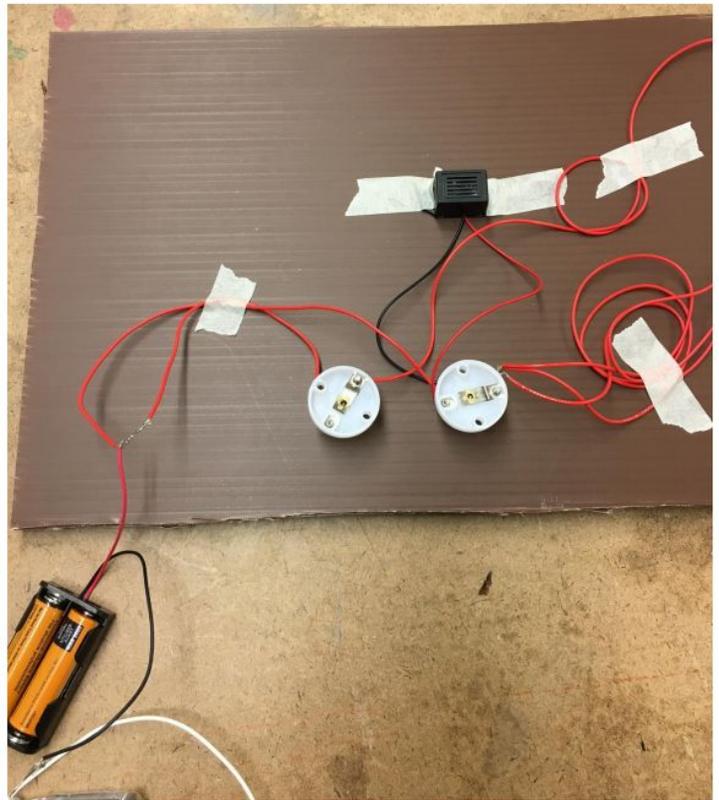
Topic/Content Standards (for this example): Social studies: world geography, ancient civilizations, US history

Summary of Project: This project could be used as an assessment tool. A student (or pair of students) think of a multiple-choice question related to geographical locations they could quiz another student on. E.g. For a unit on ancient Egypt, a question might be “Which city used to contain one of the most significant libraries of the ancient world before it was destroyed?” The student must come up with answers as well, including false ones; for the previous example, the correct answer is Alexandria, but the other choices might be Cairo, Qina, and Aswan. The student then places a printed map of the country/geographical location (for our example it would be a map of Egypt) on cardboard, and stick brass pins through the multiple-choice answer cities. For each brass pin, one of the legs is connected via wire to cardboard with the question and answers written on it (and also connected to a battery pack). Whoever is guessing the correct city must place a “wand” on the brass pin of choice. The “wand” closes the circuit when it touches a brass pin. If the student chooses the correct city, a green lamp bulb lights up; otherwise, a red lamp bulb lights up and a buzzer noise indicates that the wrong city was chosen (note: this could be simplified to a light bulb or LED only lighting up for the correct city, and not lighting up for the incorrect cities). This Map Quiz can be shared with other students in the class. Thus, not only do students go through the process of making their own assessment question(s), they also have the opportunity to test their knowledge with other students’ Map Quizzes.





Back of the map: wires connected to one of the brass pins.



Back of the question board: wires from the brass pins connected to the light bulbs, buzzer, and battery pack.