

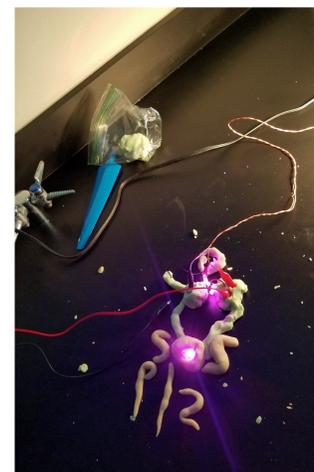
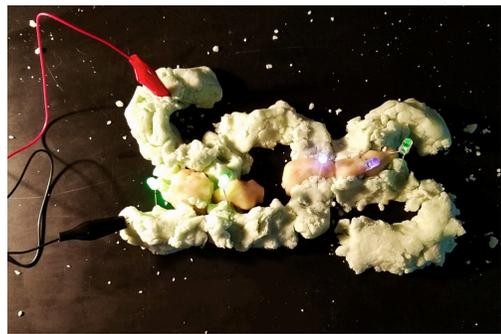


National STEM Scholar Program Island Rescue

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Challenge: You and your crew were transporting solar panels and the materials for wind turbines to a remote location when your plane crash landed. All of your communication devices were destroyed in the crash. You were able to salvage 1 solar panel, enough materials for one wind turbine, a buzzer, and 5 lights. Thankfully, one of the crew members is a geologist and she recognized that some of the soil on this remote island is conductive. Using the resources at your disposal, create a signaling system to get off the island. Since you can survive about 3 days without water, you have 3 days to complete this mission.



Goals:

- Introduce students to solar and wind panels through exploration.
- Activate prior knowledge of circuits.
- Expose students to the effectiveness of alternative forms of energy.
- NGSS Alignment: Engineering design (MS-ETS1-1, MS-ETS1-2, MS-ETS1-3) and MS-PS3-2



Materials and Process:

- Solar panel and wind turbine (I used PASCO kit), 5 LED's, buzzer, 4 wires with alligator clips, conductive and non-conductive Squishy Circuit soil, box fan, light.
- Give students box of materials, the challenge, and let them go!!!