Squishy Circuits

Conductive dough

- 1 cup Water
- 1 1/2 cups Flour
- 1/4 cup Salt
- 3 Tbsp. Cream of Tartar*
- 1 Tbsp. Vegetable Oil
- Food Coloring (optional)
- *9 Tbsp. of Lemon Juice may be Substituted

Combine 1 cup of flour and the rest of the ingredients in a medium sized pot. Cook on medium heat, stirring constantly, until dough forms a clump in the center of the pot. Place ball of dough onto a lightly floured surface. Allow to cool, then knead in enough flour to reach desired consistency.

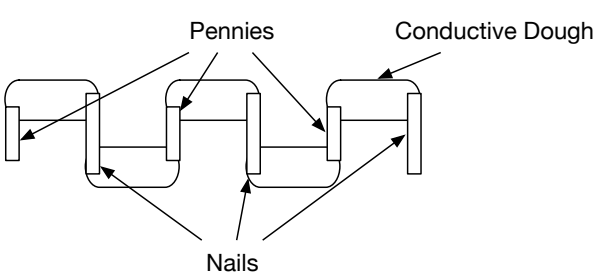
Insulating dough

- 1 1/2 cup Flour
- 1/2 cup Sugar
- 3 Tbsp. Vegetable Oil
- 1/2 cup Deionized (or Distilled) Water

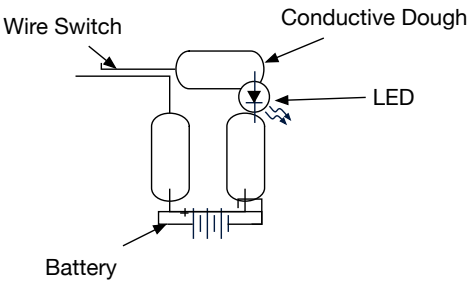
Mix 1 cup of flour, sugar, and vegetable oil in a medium sized bowl. Add a small amount of water (~1 Tbsp.), and stir. Repeat adding small amounts of water and stirring until the dough has a sticky texture. Knead additional flour into the dough until it reaches the desired consistency.

Both types of dough can be stored in an airtight container or plastic bag for several weeks. If some of the water condenses on the surface of the container during storage, just knead it back into the dough. These recipes were developed by the Playful Learning Lab at the University of St. Thomas. For more information, including step-by-step photos and project ideas, visit http://courseweb.stthomas.edu/apthomas/SquishyCircuits/.

Circuits and Devices



Conductive Dough Battery



LED Flashlight