

Squishy Circuits Basics

Original MKE Mixers Team

Audience

School age children, Teens, Adults, Librarians

Description

Included in this Mix are 15 Squishy Circuits kits. The goal of the project is to design tools and activities which allow kids of all ages to create circuits and explore electronics using play dough.

Budget

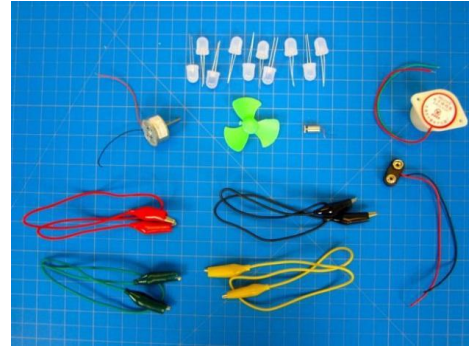
\$1-\$50

Mixes

- Circuits Mix Box 3: Little Bits & Squishy Circuits

Advance Planning

You do have to make the dough prior to the program. See the recipe card for details.



Budget Details

Many of the items for the dough you might already have on hand. The prices given here are approximate.

Ingredient	Rough Cost
Flour	\$2.50 for a 5lb. bag
Cream of tartar	\$4.50 for a container
Salt	\$0.65 for a container
Distilled water	\$1.50 for a gallon
Sugar	\$2.99 for a 4lb. bag
Vegetable oil	\$2.99 for a bottle
Food coloring (optional)	\$3-\$5 for a pack of 4 colors
Total	Approx. \$18-\$25

Day-of-Event Activity

These activities are designed such that the dough is used to connect components. Never connect components, such as LEDs, directly to the battery pack, as running too much current through components can damage them, possibly causing them to overheat or pop. Follow standard electricity safety considerations. Please see the University of St. Thomas's Squishy Circuits page for more project ideas and details.

- <https://squishycircuits.com/collections/projects>

Recipes

<https://squishycircuits.com/pages/dough-recipes>

Conductive Dough

- 1 Cup water
 - 1 1/2 Cups Flour
 - 1/4 Cup Salt
 - 3 Tbsp. Cream of Tartar or 9 Tbsp. Lemon Juice
 - 1 Tbsp. Vegetable Oil
 - Food Coloring (optional)
1. Mix ingredients holding back 1/2 cup of flour
 2. Stir continuously over medium heat until a dough ball forms
 3. Remove from heat and knead in additional flour until a desired consistency is formed

Insulating Dough

- 1 1/2 Cups Flour
 - 1/2 Cup Sugar
 - 3 Tbsp. Vegetable Oil
 - 1/2 Cup Deionized (or Distilled) Water
1. Mix dry ingredients and oil holding back 1/2 cup of flour
 2. Continue to add small amounts of water, kneading continuously
 3. After a dough ball can be formed, knead flour into the dough to remove stickiness