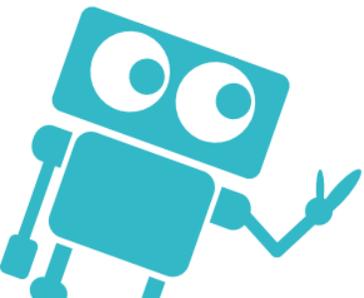


T

Tinker

5

Points



## Squishy Circuits

Building a Circuit

Make an LED light work using conductive play dough, a light, and a battery pack.

MackinMaker

# T

Tinker

# 5

Points

## Materials:

- Squishy Circuits Deluxe Kit
- Duracell Coppertop Alkaline Battery, AA (4-pack)

## Quick Start:

1. Brainstorm what you want to mold out of the conductive dough (any dough besides white). Making two shapes out of the conductive dough is a great way to start.
2. Gather the materials you need and start to mold your creation.
3. Plug in your components (LED light and battery pack). Be careful not to create any short circuits.
4. Does it work? Keep testing until you get it!
5. Once you get it to work, add more lights or experiment with the insulator play dough.

## Hints and Tips:

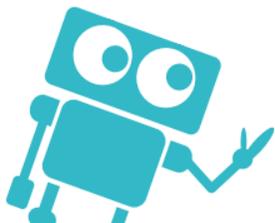
- Use the Squishy Circuits Quick Start Guide to learn the basics of a Squishy Circuit.
- It is easier to have multiple separate dough components. If you want to make one larger sculpture, use the white insulator dough to separate your components.
- Is it not turning on? Switch up how your components are connected.

## Extended Challenges

**Science:** Add the motor and/or test out the buzzer. What do you think you could make using the motor? Share your ideas with someone you know.

**Science:** Experiment with the white insulating dough. What objects can you make with the play dough?

**\*\*Disclaimer:** Please be sure to monitor and assist students under the age of 8 while they are exploring with Squishy Circuits.



A purple rounded square containing a white letter 'S' above the text 'Skill-Up'.

Skill-Up

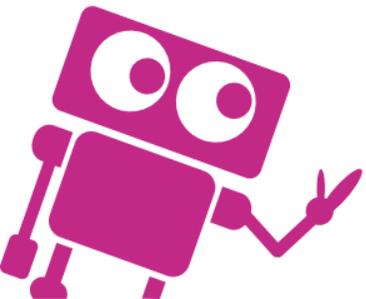
A purple rounded square containing a white number '9' above the text 'Points'.

Points

## Squishy Circuits

Switch Up to Skill-Up

Make something using either the motor or the LED lights. Can you get the switch to turn the power on and off?

The MackinMaker logo, featuring the word 'Mackin' in black and 'Maker' in blue, set against a white rounded rectangular background.

**S**

Skill-Up

**9**

Points

## Materials:

- Squishy Circuits Deluxe Kit
- Duracell Coppertop Alkaline Battery, AA (4-pack)

## Quick Start:

1. Brainstorm what you want to mold out of the conductive play dough (any dough besides white).
2. Gather the materials you need and start to mold your creation.
3. Plug in your components (switch, LED light, and/or motor). Be careful not to create any short circuits.
4. Does it work? Does the switch turn the light and/or motor on and off? If not, keep testing until you get it!

## Hints and Tips:

- Use the Squishy Circuits Quick Start Guide to learn the basics of a Squishy Circuit.
- It is easier to have multiple separate dough components. If you want to

make one larger sculpture, use the white insulator dough to separate your components.

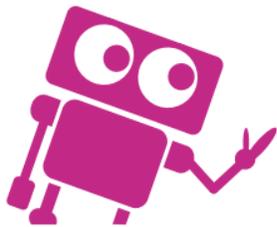
- Is it not turning on? Switch up how your components are connected.
- Sandwich insulator dough between two pieces of conductive dough to attach lights to your creation. Remember, in order for electricity to work, the LED light must be connected to two different pieces of dough—the one that is connected to the black wire and the one that is connected to the red wire.

## Extended Challenges

**Science:** Can you add additional lights and/or a buzzer into your design?

**English/Language Arts:** Think of a story you recently read. Make something from that story using the dough.

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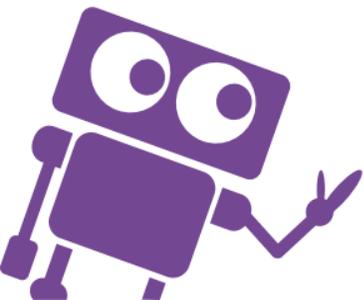


**D**

Design

**15**

Points



## Squishy Circuits

### Light-Up Pet

Choose an animal that you would like as a pet. Make it out of both the conducting and insulating dough and add light(s) to it. What is your pet's name?

MackinMaker

**D**

Skill-Up

**15**

Points

## Materials:

- Squishy Circuits Deluxe Kit
  - Additional classroom materials (optional)
- 

## Quick Start:

1. Brainstorm what kind of pet you want to mold out of the conductive and insulating play dough. What color dough do you need?
  2. Gather the materials you need and start to mold your creation.
  3. Plug in your components (LED light and battery pack). Be careful not to create any short circuits.
  4. Does it work? If not, keep trying until you get it! How many lights can you add to your creature?
- 

## Hints and Tips:

- Use the Squishy Circuits Quick Start Guide to learn the basics of a Squishy Circuit.
- It is easier to have multiple separate

dough components. If you want to make one larger sculpture, use the white insulator dough to separate your components.

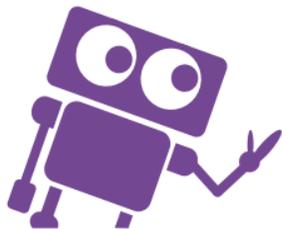
- Is it not turning on? Switch up how your components are connected.
  - Sandwich insulator dough between two pieces of conductive dough to attach lights to your pet. Remember, in order for electricity to work, the LED light must be connected to two different pieces of dough—the one that is connected to the black wire and the one that is connected to the red wire.
- 

## Extended Challenges

**English/Language Arts:** Sculpt a character from a book out of conductive and insulating dough instead of a pet. Can you add a light?

**Art:** Sculpt an object of your choice out of the dough. Add a light or a motor to create special effects!

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G

Global



20

Points

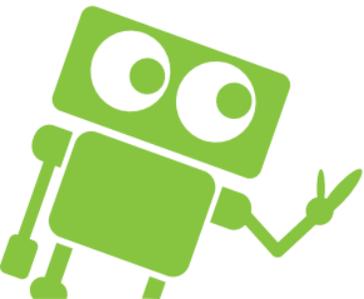
## Squishy Circuits

Fun Fake Food

Create your favorite food with at least one LED light as a part of your creation.



MackinMaker



## Materials:

- Squishy Circuits Deluxe Kit
- Additional classroom materials (optional)

## Quick Start:

1. Brainstorm your favorite foods. What could be made using the Squishy Circuits? Where will you put your LED light? Use conductive and insulating play dough. What color dough do you need?
2. Gather the materials you need and start to mold your creation.
3. Plug in your components (LED light and battery pack). Be careful not to create any short circuits.
4. Does it work? If not, keep trying until you get it! How many lights can you add to your food?

## Hints and Tips:

- Use the Squishy Circuits Quick Start Guide to learn the basics of a Squishy Circuit.
- It is easier to have multiple separate

dough components. If you want to make one larger sculpture, use the white insulator dough to separate your components.

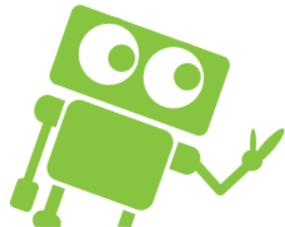
- Is it not turning on? Switch up how your components are connected.
- Sandwich insulator dough between two pieces of conductive dough to attach lights to your scene. Remember, in order for electricity to work, the LED light must be connected to two different pieces of dough—the one that is connected to the black wire and the one that is connected to the red wire.

## Extended Challenges

**Science:** What else would you eat with the food you made? Make more food to go with it or make some for your friends too.

**Science:** Make something from nature using the conductive and insulating dough and an LED light.

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I

Innovator

25

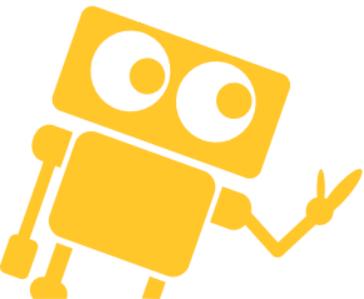
Points

## Squishy Circuits

### Squishy Landscape

Make a landscape picture out of Squishy Circuit play dough, LED lights, and any other Squishy Circuit material of your choice.

MackinMaker



## Materials:

- Squishy Circuits Deluxe Kit
  - Additional classroom materials (optional)
- 

## Quick Start:

1. Brainstorm what you want your landscape to look like. Use conductive and insulating play dough. What color dough do you need?
  2. Gather the materials you need and start to mold your creation.
  3. Plug in your components (LED light and battery pack). Be careful not to create any short circuits.
  4. Does it work? If not, keep trying until you get it! How many lights can you add to your landscape
- 

## Hints and Tips:

- Use the Squishy Circuits Quick Start Guide to learn the basics of a Squishy Circuit.
- It is easier to have multiple separate

dough components. If you want to make one larger sculpture, use the white insulator dough to separate your components.

- Is it not turning on? Switch up how your components are connected.
  - Sandwich insulator dough between two pieces of conductive dough to attach lights to your scene. Remember, in order for electricity to work, the LED light must be connected to two different pieces of dough—the one that is connected to the black wire and the one that is connected to the red wire.
- 

## Extended Challenges

**English/Language Arts:** Create a scene from a story you recently read. What is happening in your picture?

**Art:** Create a scene of your choice. When you are done, show it to someone you know!

\*\*Disclaimer: Please be sure to monitor and assist students under the age of 8 while they are exploring with Squishy Circuits.

