


Pattern & Circuit Design

with






RAN ZHOU

- Architecture and Urban Planning
- Crafter
- Physical Computing
- Love Robot 



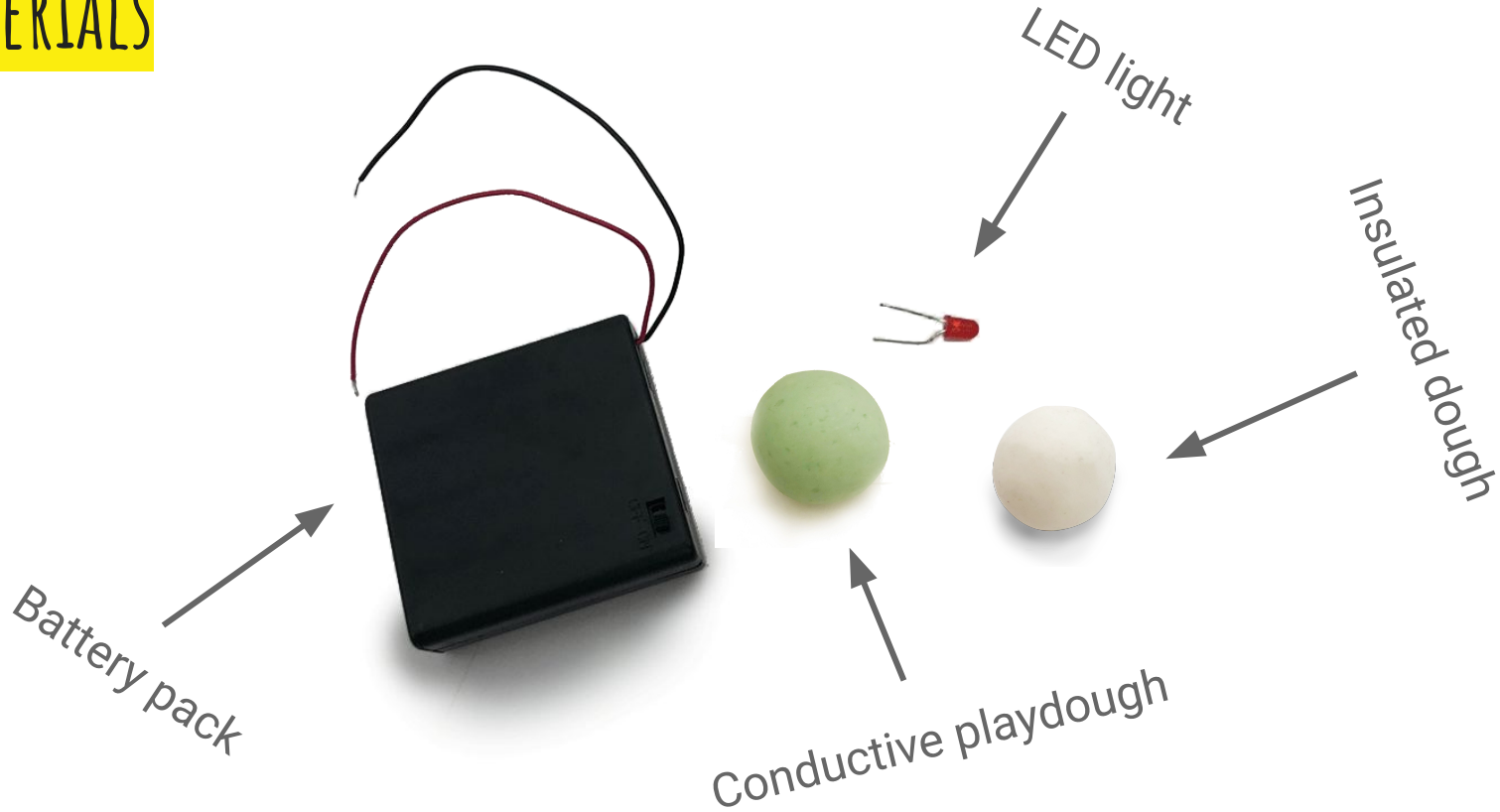
BRANDI KINARD

- Mechanical Engineering
- Fine Artist
- Activist
- Love Sci-fi 



Giant, playdough sculpture by Damien Hirst

MATERIALS



STEP ONE

MAKE A CIRCUIT



STEP TWO

MAKE A CIRCUIT



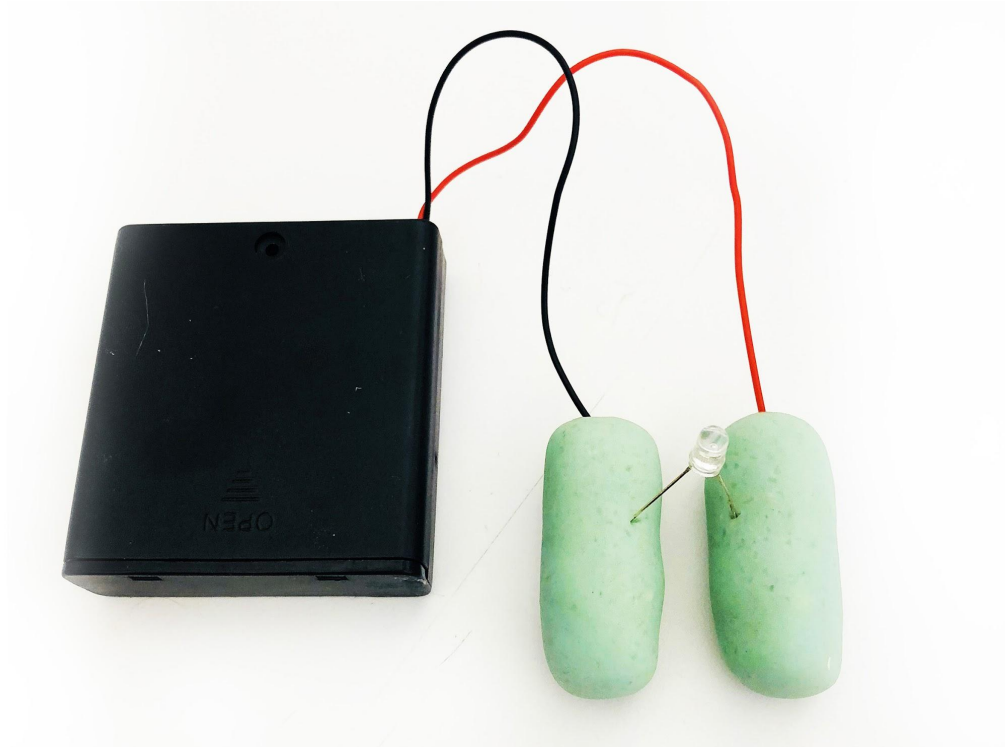
STEP THREE

MAKE A CIRCUIT



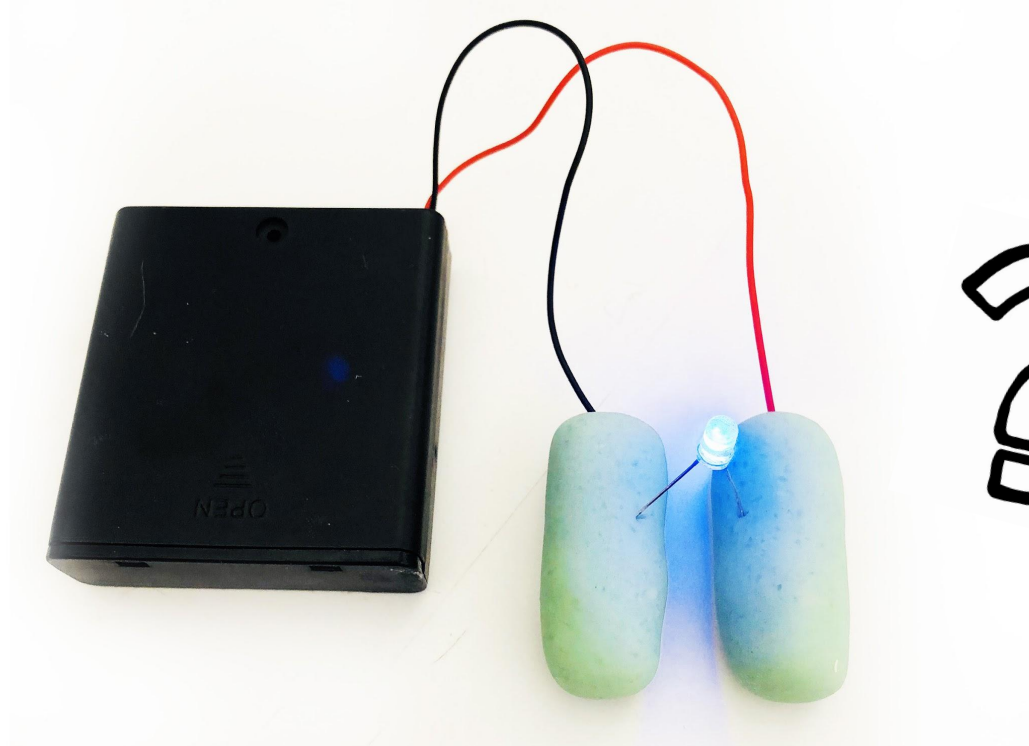
STEP FOUR

MAKE A CIRCUIT

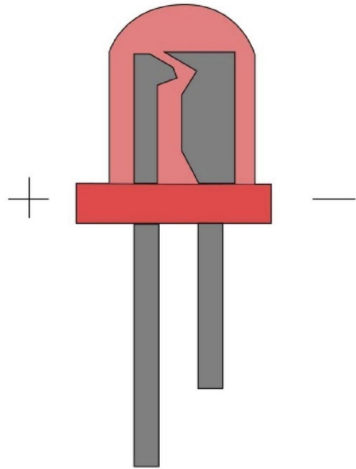


STEP FIVE

MAKE A CIRCUIT



Light-emitting diode (LED)



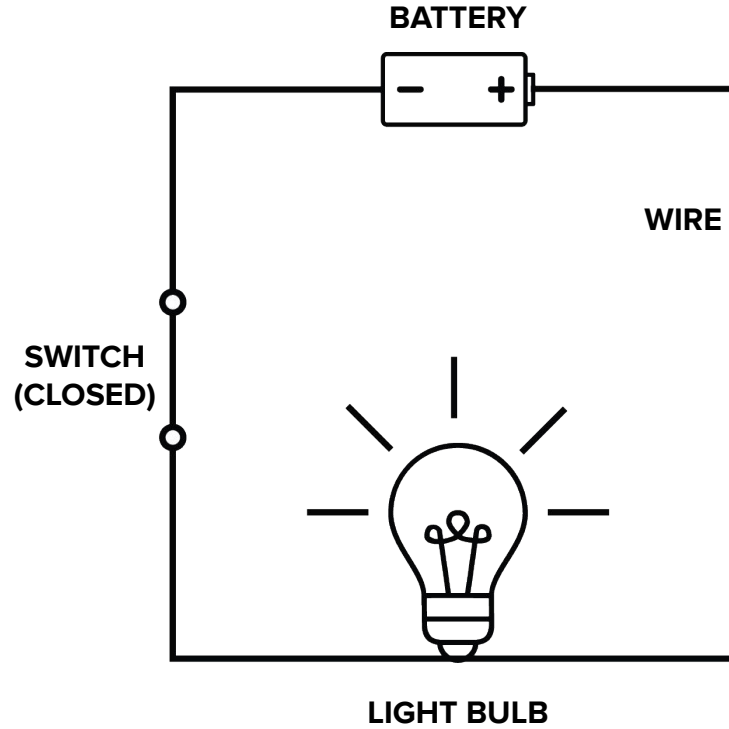
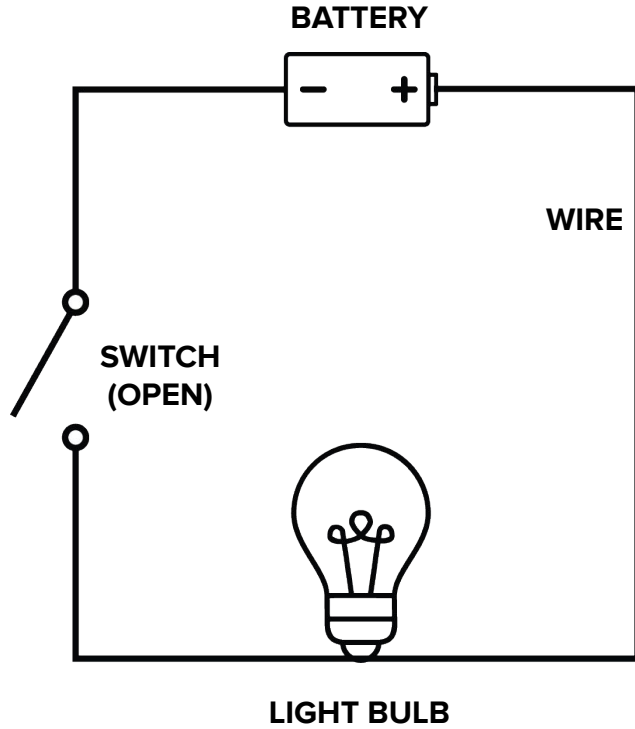
a semiconductor light source that emits light when current flows through it.

The long leg - connect to the positive side(+) - Red Wire

The short leg - connect to the negative side(-) - Black Wire

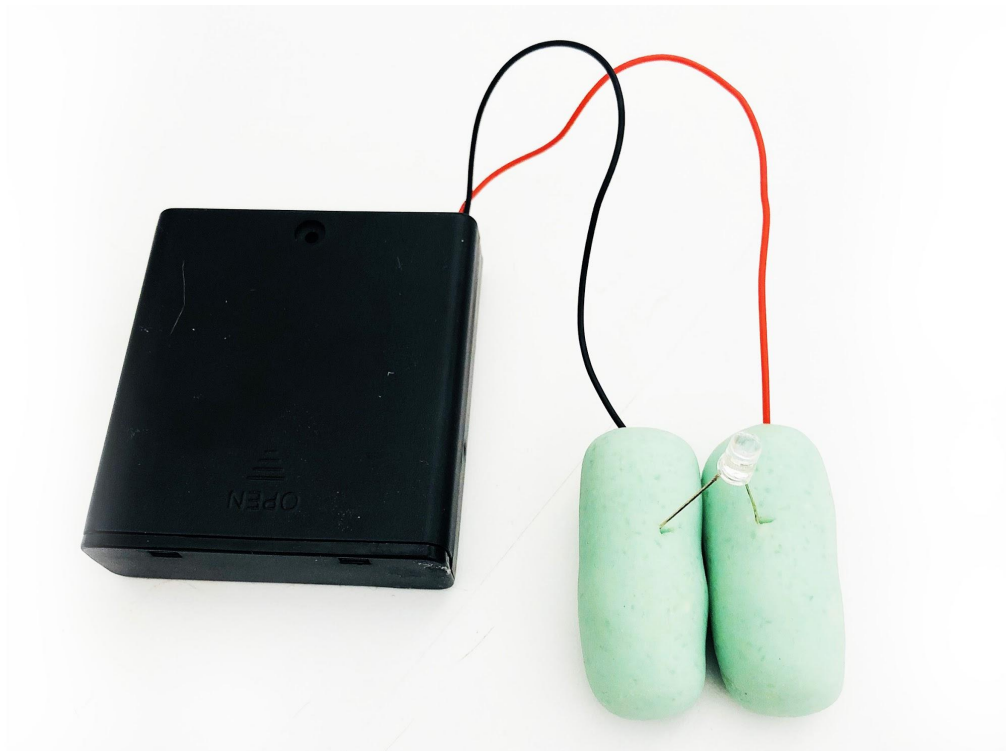
CLOSE CIRCUIT

MAKE A CIRCUIT



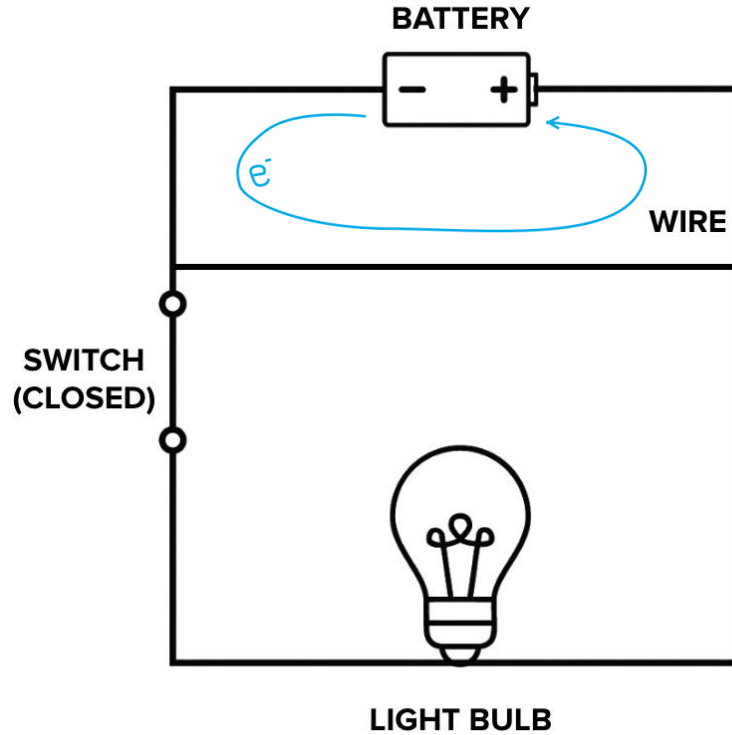
STEP SIX

MAKE A CIRCUIT



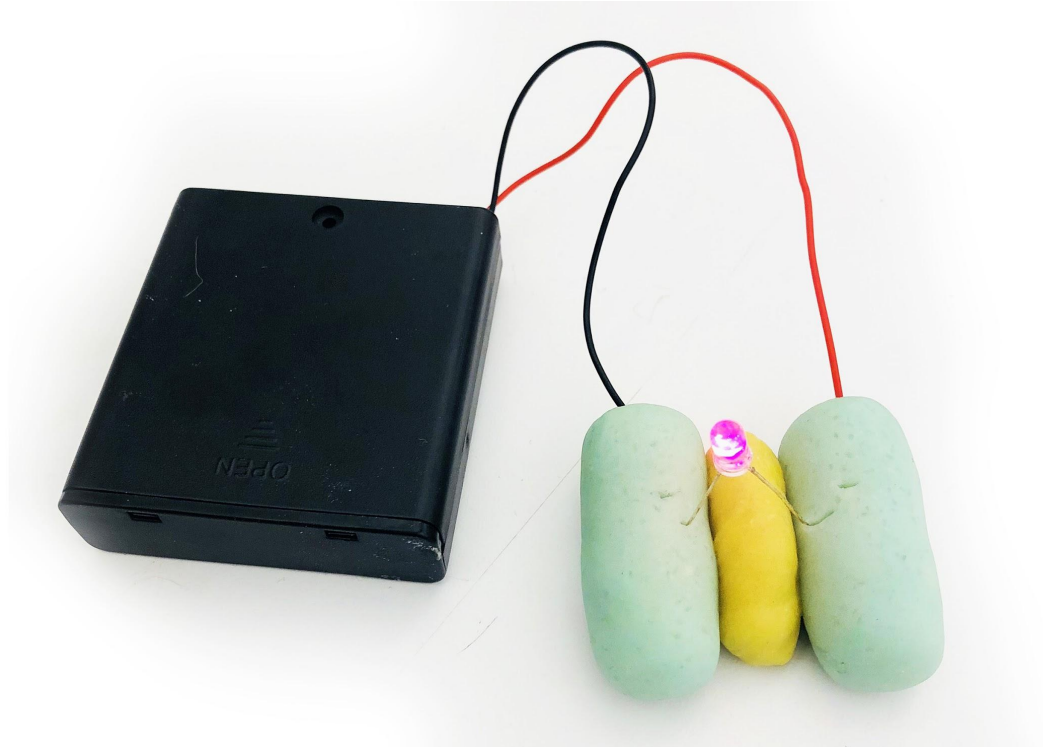
SHORT CIRCUIT

MAKE A CIRCUIT



STEP SEVEN

MAKE A CIRCUIT



PLAY DOUGH

MAKE A CIRCUIT



Conductive Playdough

Salt



Insulated Playdough

Sugar

COIL METHOD



COIL METHOD

STEP ONE



COIL METHOD



STEP TWO

COIL METHOD

STEP THREE



COIL METHOD



PATTERN DESIGN WITH COILS

FANTASY ANIMAL

STEP ONE



FANTASY ANIMAL

STEP TWO



FANTASY ANIMAL

STEP THREE



FANTASY ANIMAL

STEP FOUR



FANTASY ANIMAL

STEP FIVE



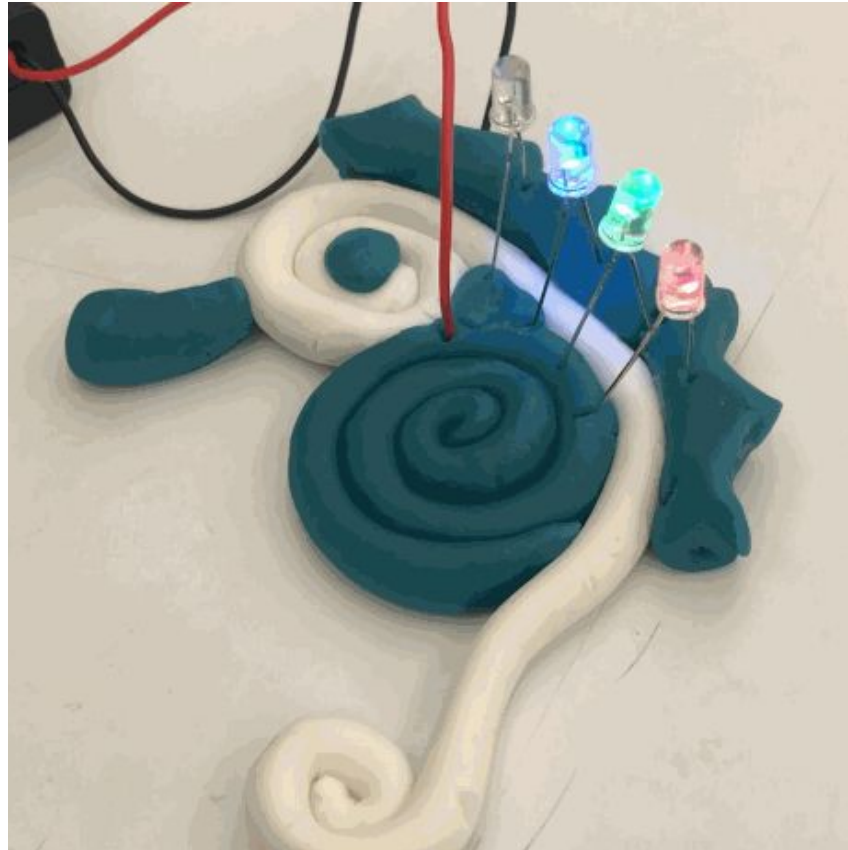
FANTASY ANIMAL

STEP SIX



FANTASY ANIMAL

STEP SEVEN



CREATIVE TIME!!

DESIGN YOUR OWN FANTASY ANIMAL

WITH THE COIL ELEMENT

AND LEDs

THANKS