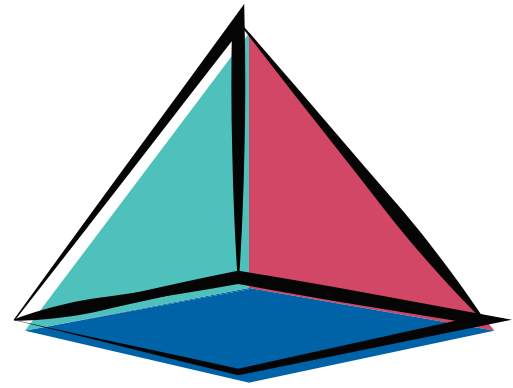


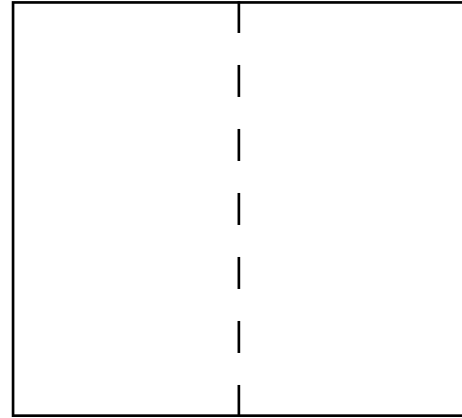
Popup and Basic Electronics

Eldy Lazaro  Jean Menezes

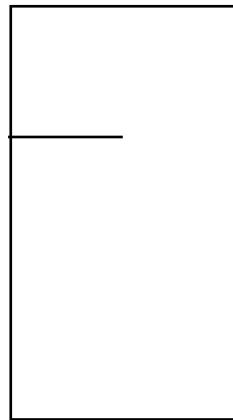


**basic
pop-ups**

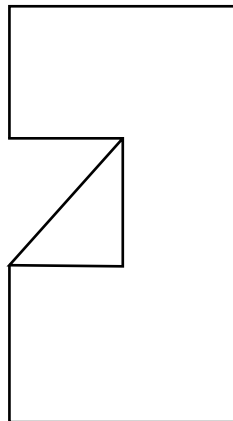
Elementary Folds



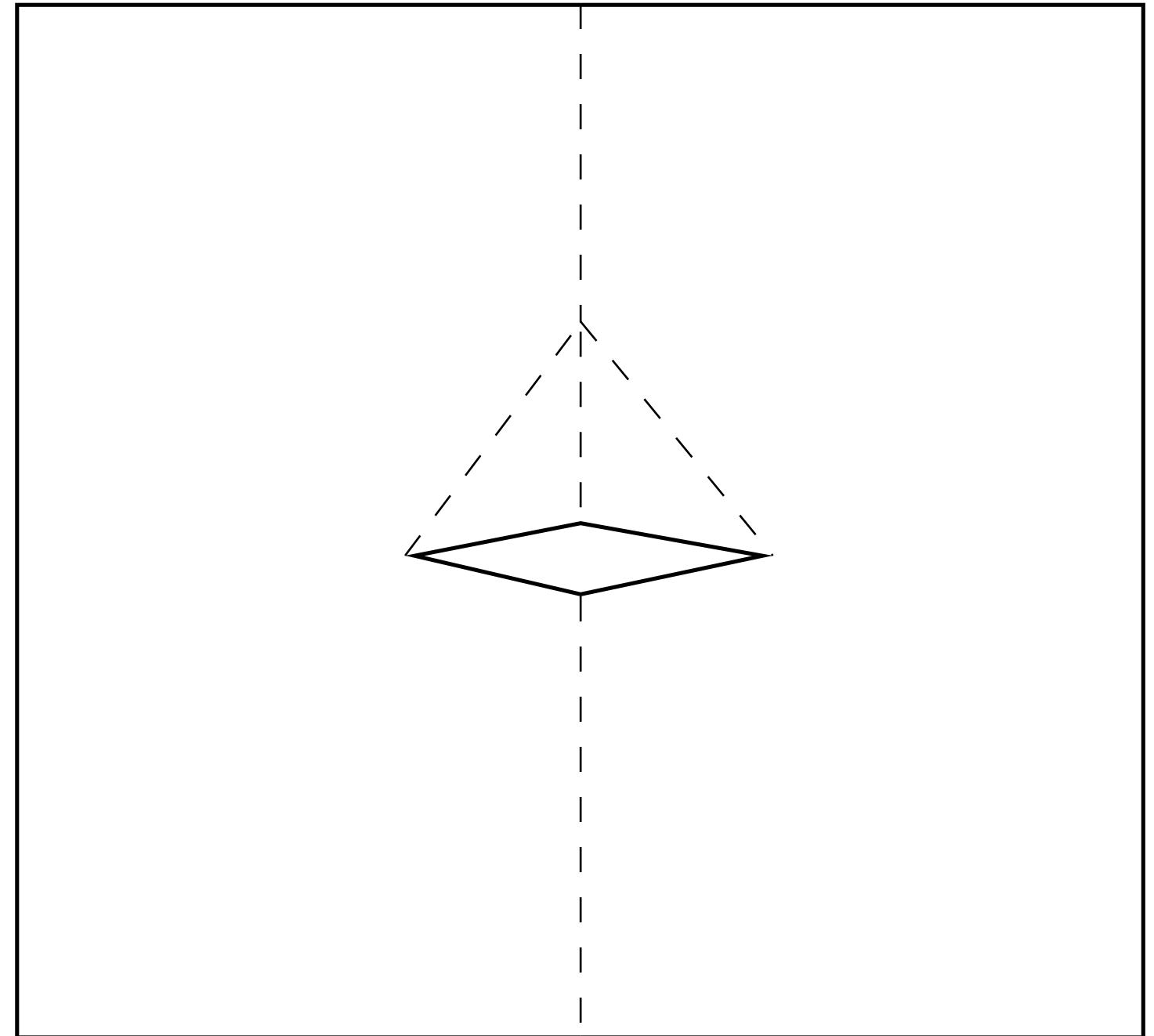
1 - Fold card in half



2 - Make two cuts

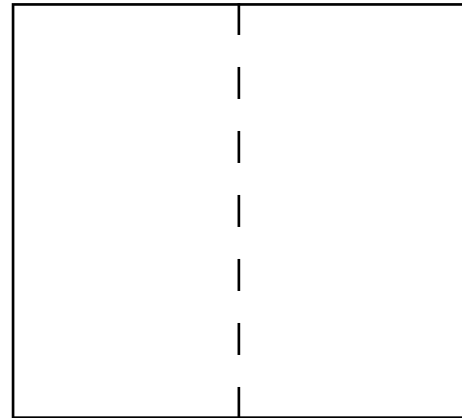


3 - Fold the cut

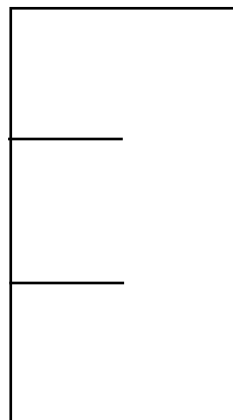


converging creases

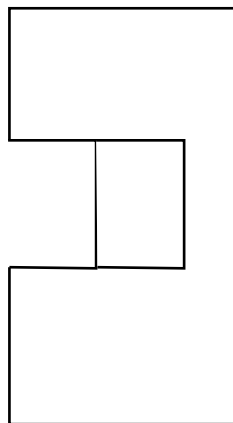
Elementary Folds



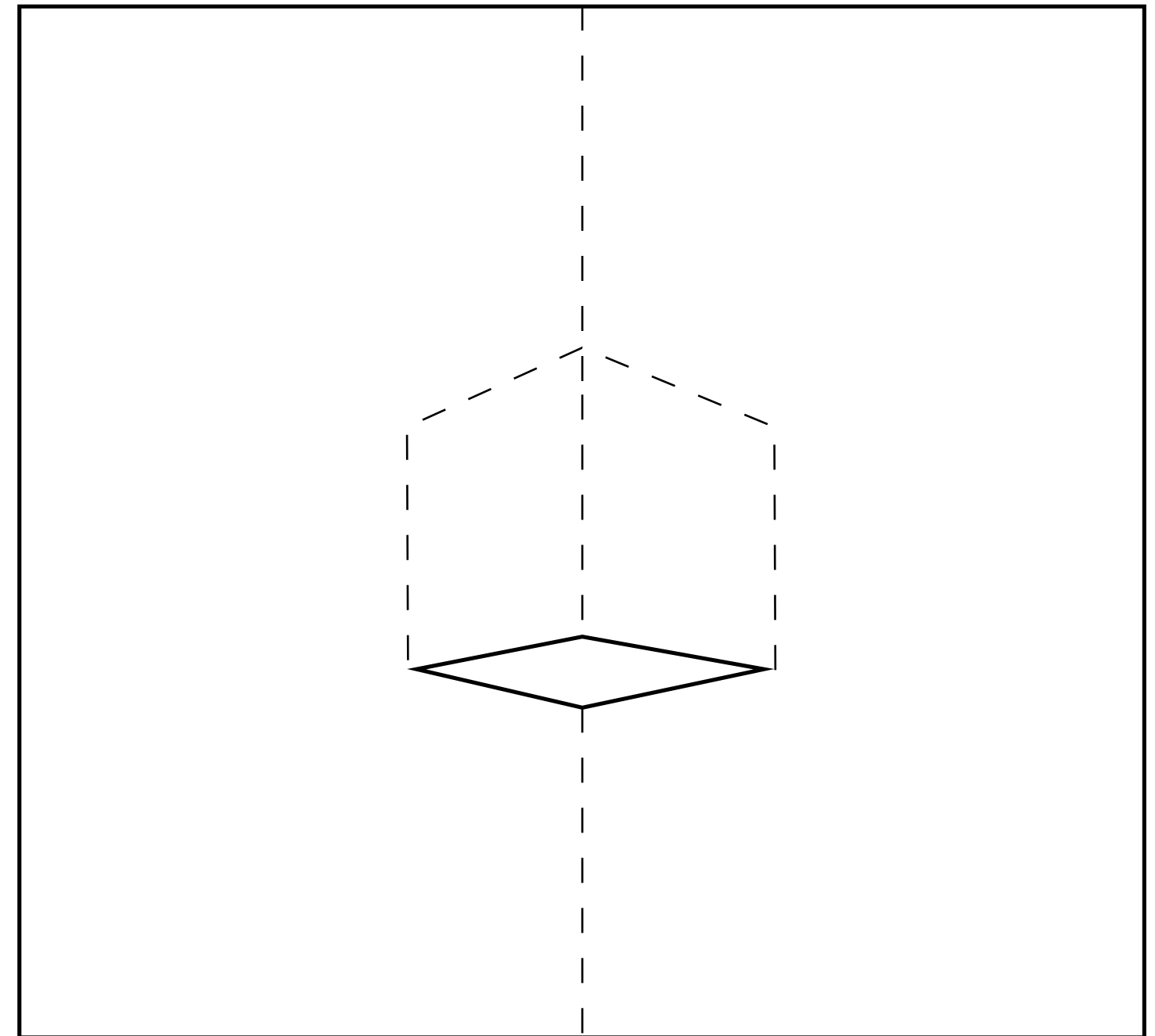
1 - Fold card in half



2 - Make two cuts

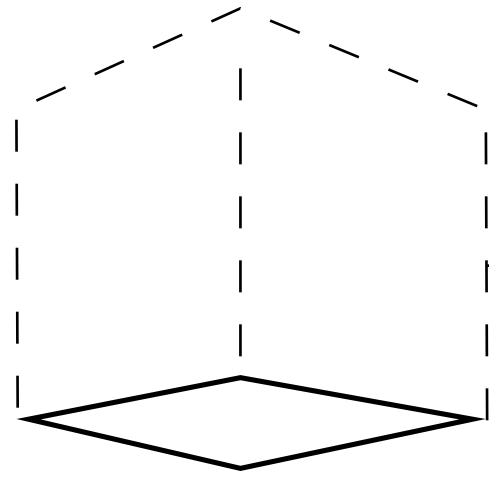


3 - Fold the cut

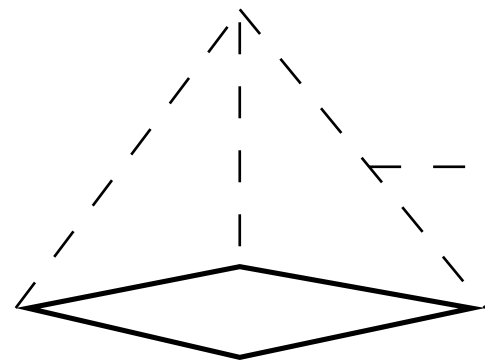


parallel creases

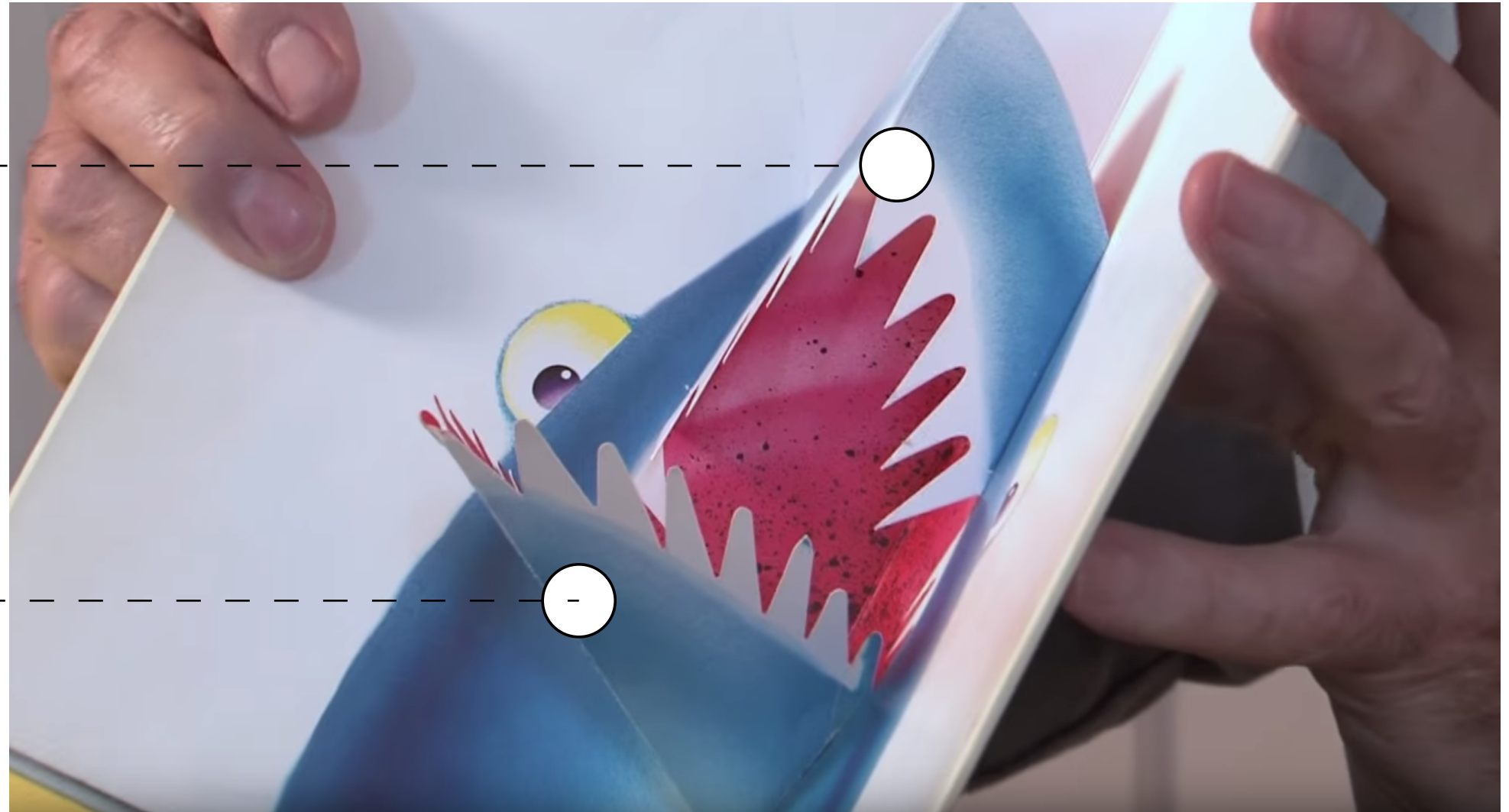
Example



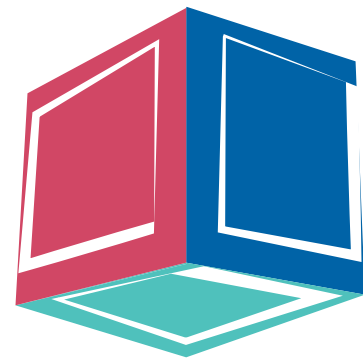
parallel fold



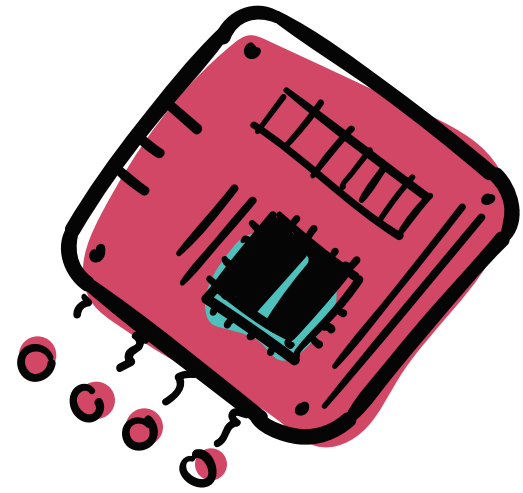
converging fold



You can tell the type of fold by looking at the back of the fold.



popping a cube
=p

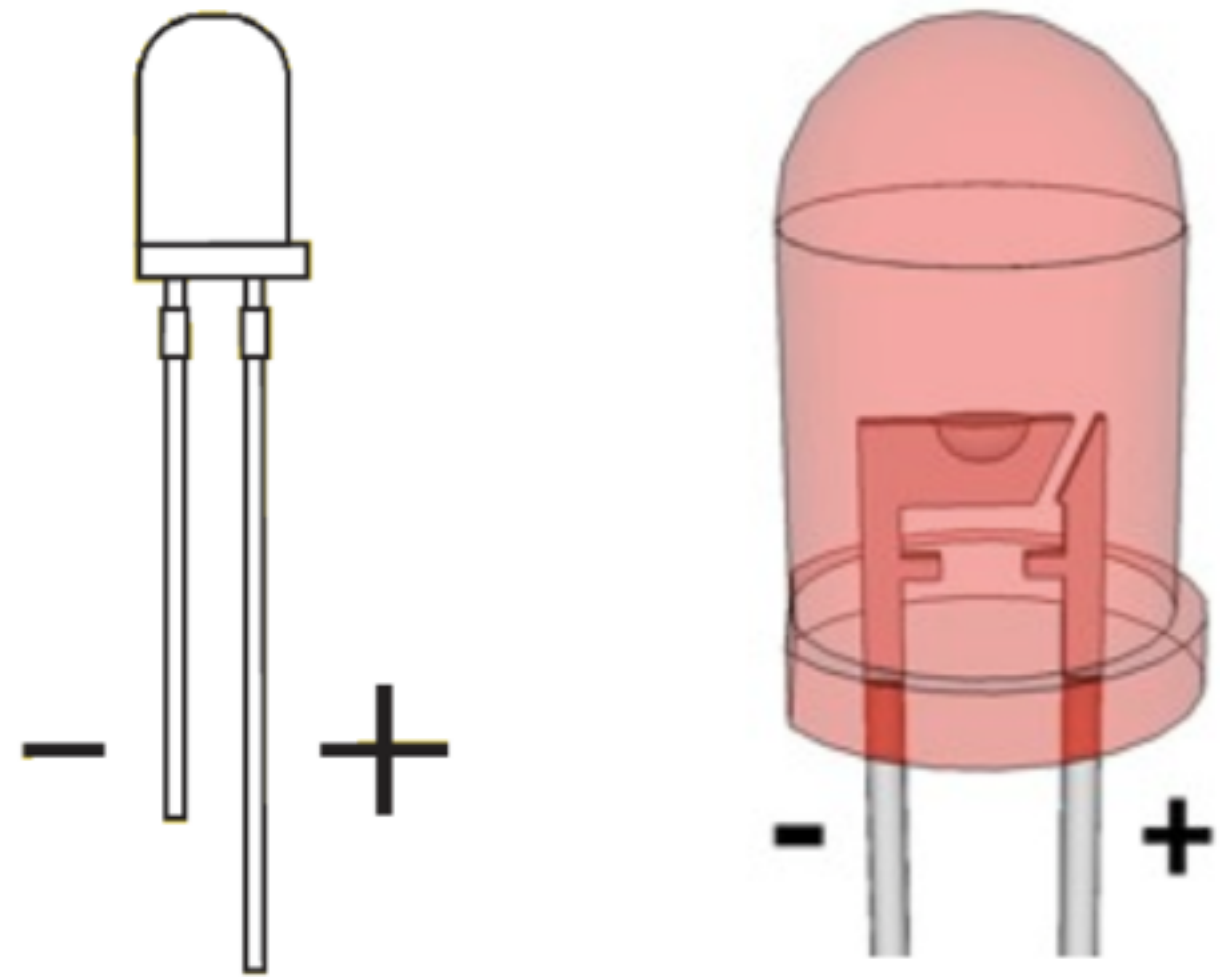
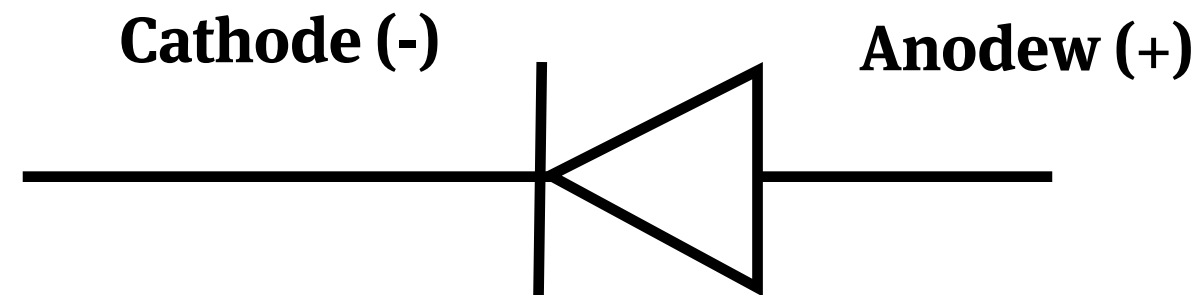


basic electronics

Light-Emitting Diode (LED)

Converts electric energy into light

Polarity is important



Battery

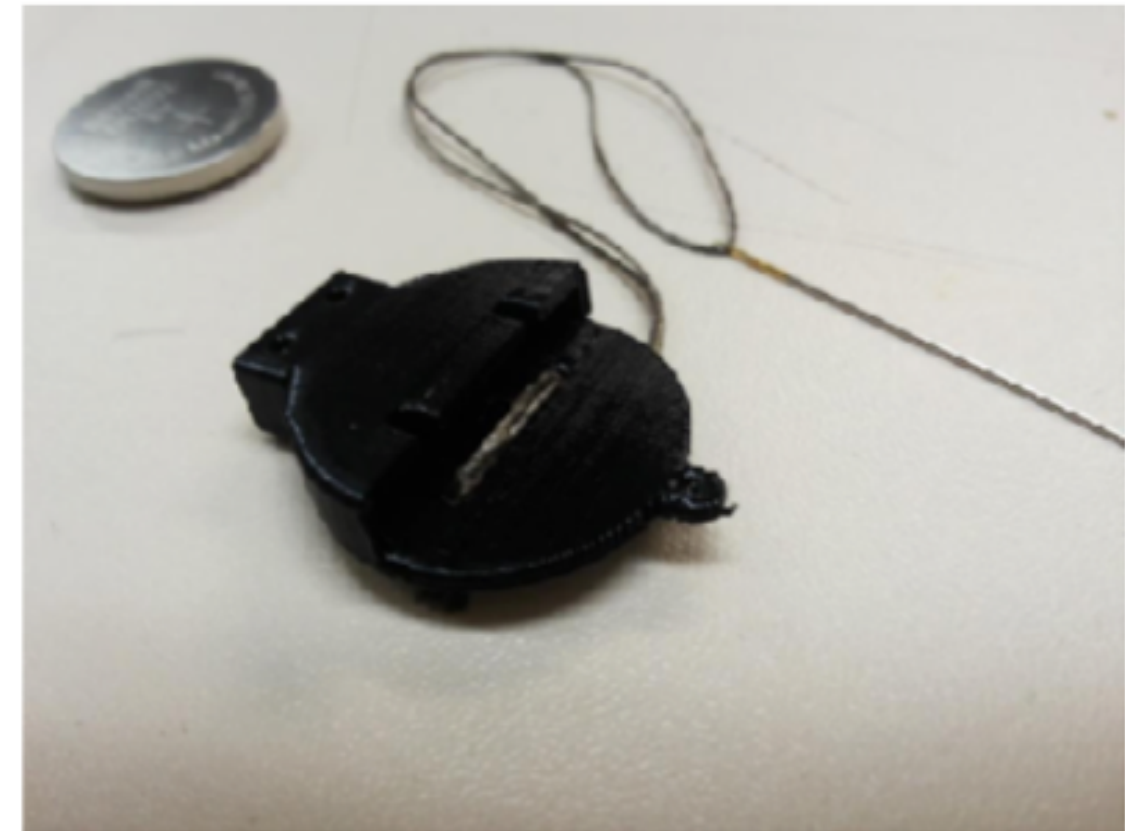
3V coin battery



Conductive fabric



Sewable Battery Holder



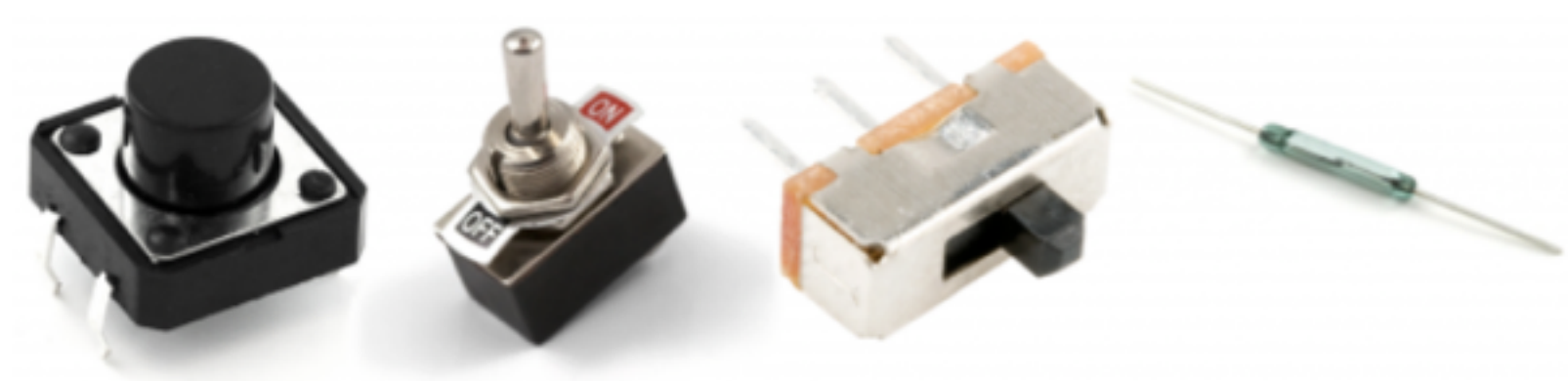
3D Printed Battery holder

Electricity

Bulb light functionality

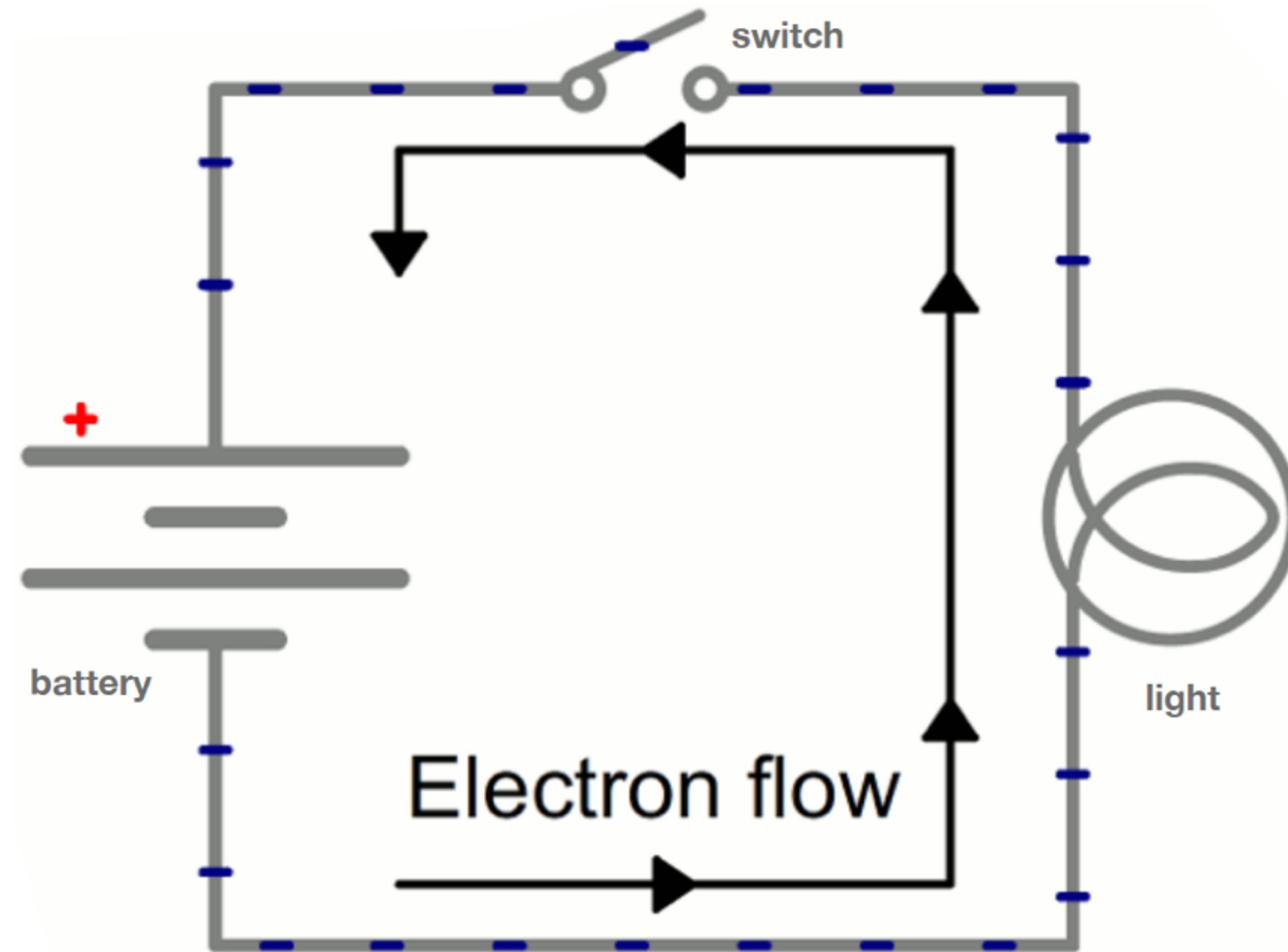


Switches



Electricity

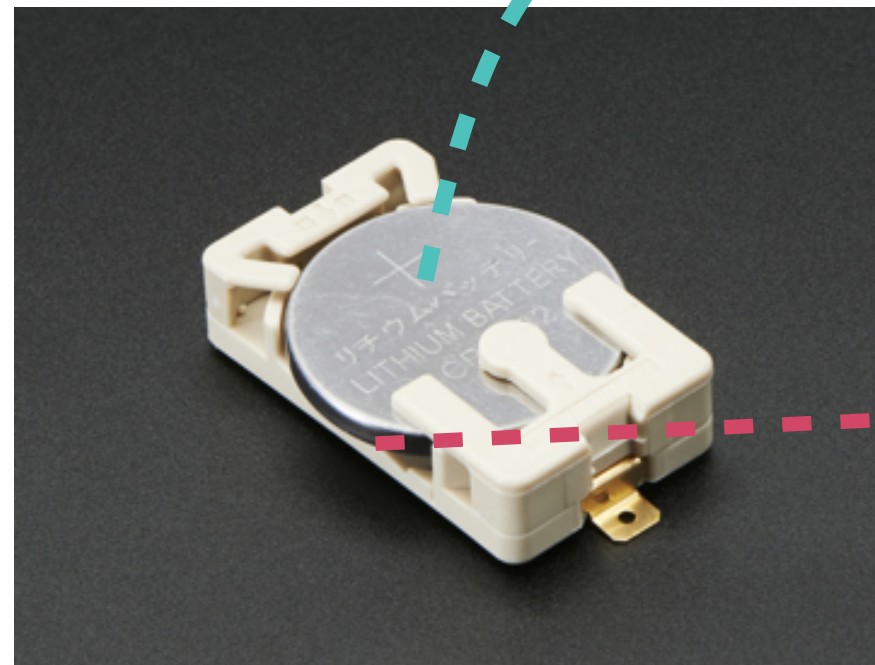
Bulb light functionality



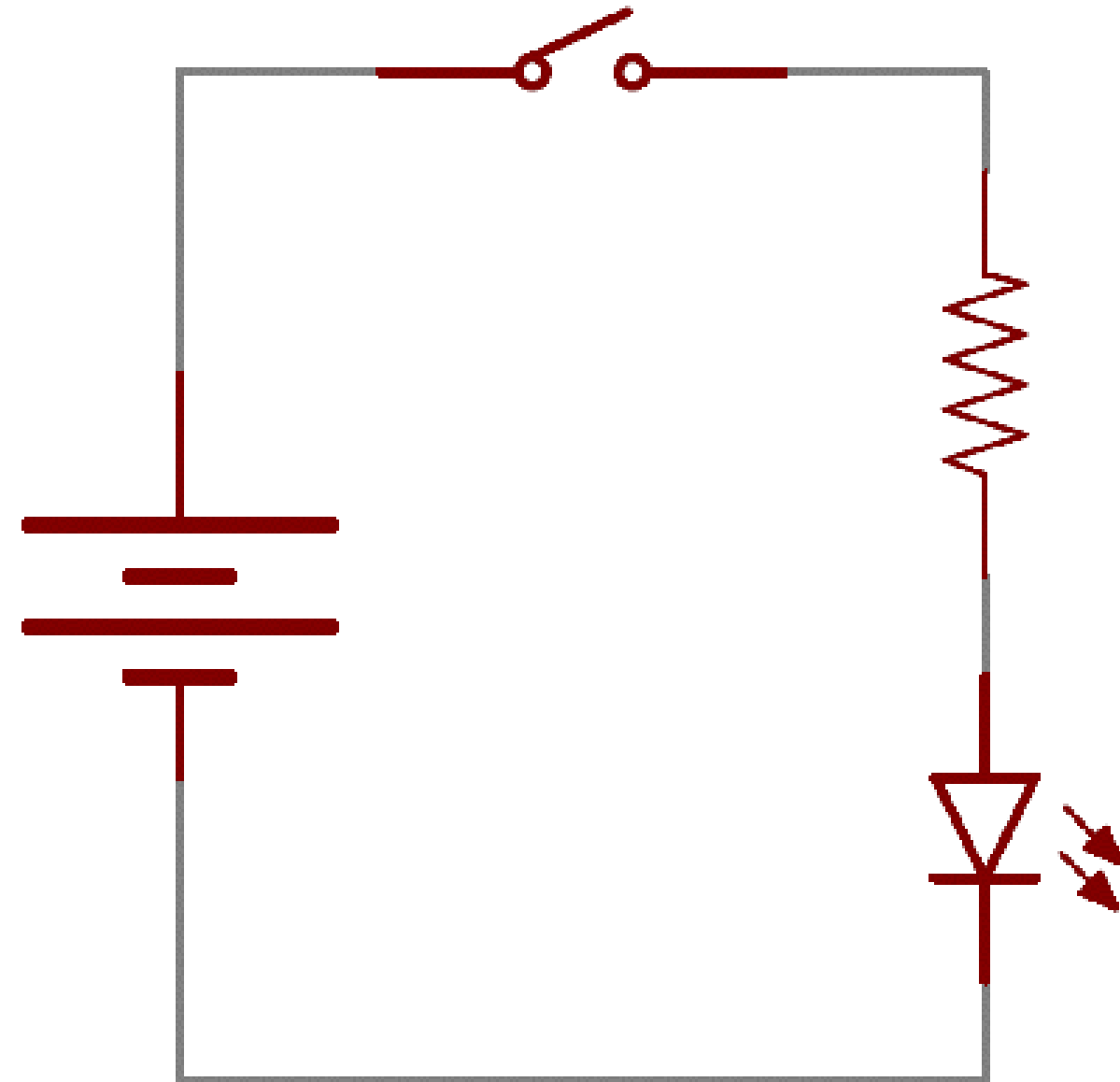
Plan your circuit

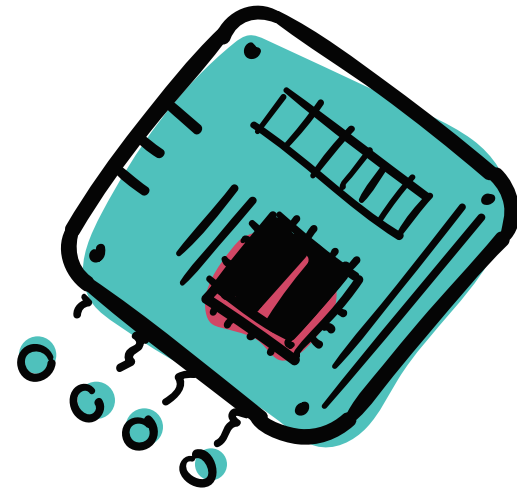
Bulb light functionality

1. Connect the negative side of the battery to the negative legs of all the LEDs (parallel)
2. Connect the positive side of the battery to one of the sides of your switch
3. Connect the other side of your switch to the positive legs of all the LEDs



Making a button





Let's create our first circuit

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