

**Conceptual**

- Make an internal diagram of the 4-pin switch
- Make a circuit diagram to show how to connect switch to control your light
- Draw the equivalent circuit schematic diagram.

**Basic Make**

- Make a LED turn on using switch
- Make a drawing of how a breadboard is wired

**Advanced/Extended Make**

- Make your diagrams using Fritzing
- Use limit switch and explore NO and NC connections

**Equipment**

- Computer with access to Fritzing
- Digital Multi Meter (DMM)
- Circuit components: 4-pin switch, limit switch

**Objective**

## Physics Concepts

- Switch bounce

## Experimental analysis

- Current limit for circuit elements

## Technology Concepts

- Schematic symbols