



Thinker1 Push Button

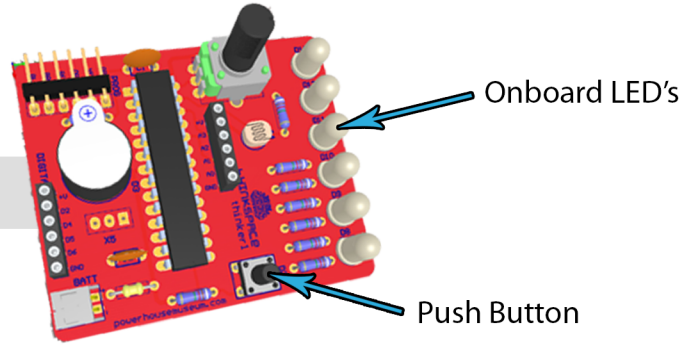
Activity One



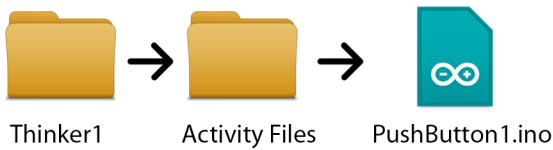
What are we doing?

We will read the state of the button and control an LED based on the state.

What parts of the board will you be using?



What files will we be using?



Instructions

Step 1

Open the file:  PushButton1.ino

Step 2

Look for the comment `//initialise button pin` and insert this code underneath:

```
pinMode(buttonPin, INPUT);
digitalWrite(buttonPin, HIGH);
```

This sets up the button so that we can read from it and tell when it has been pressed.

Step 3

Look for the comment `//read in button value` and insert this code underneath:

```
buttonState = digitalRead(buttonPin);
```

This will read the value of our button into a variable. It will give a value of either 0 or 1 (false or true).

Step 4

Look for the comment `//turn the LED on and off` and insert this code underneath:

```
if (buttonState)
{
  digitalWrite(led1Pin, HIGH);
}
else
{
  digitalWrite(led1Pin, LOW);
}
```

This conditional statement will switch the led on if the buttonState variable is true. Upload to your thinker1 board and give it a try.

Program Logic

