













### PAGE 2

#### **OBJECTIVE**

We are going to use a Raspberry Pi and Scratch to turn an LED on.

#### **GETTING STARTED**

To open Scratch click on Menu -> Programming -> Scratch

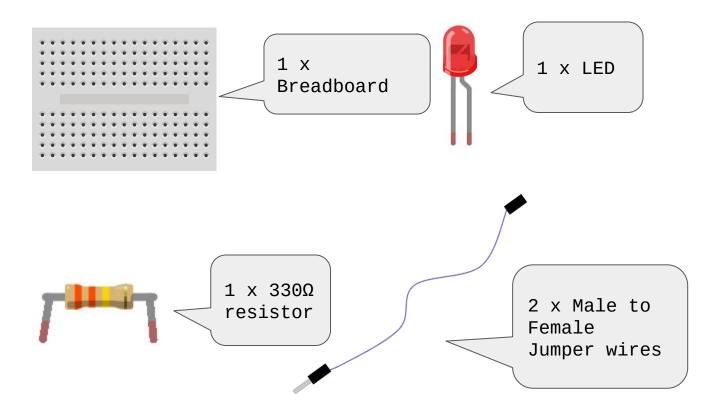




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## **BUILDING THE CIRCUIT**

You will need the following electronic components to create the circuit.

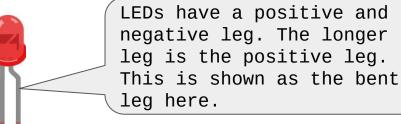


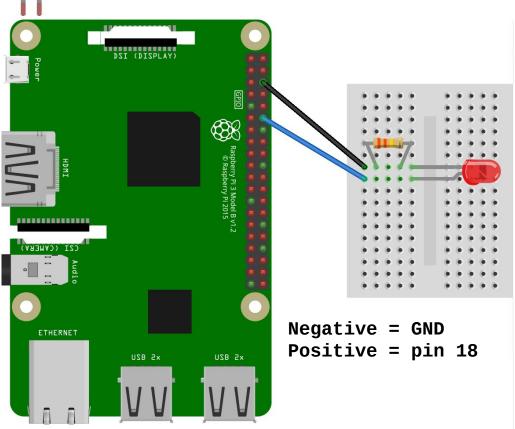




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#### **BUILDING THE CIRCUIT**









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#### CODE

All the code for this tutorial can be found in the Control menu.



All of the broadcast blocks have custom text. To add the custom text click on the black arrow and click on new/edit

- The first block of code tells the program to run when the green flag is clicked.
- The second block tells scratch to interact with the GPIO (General Purpose Input Output) pins on the Raspberry Pi.
- > The third block of code configures pin 18 as an output.
- The fourth block of code tells the Raspberry Pi to turn pin 18 on, which is where your LED is attached.





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#### **RUNNING THE CODE**

To Run the code click on the green flag above Felix the cat. You should see the LED come on.

If not make sure your circuit is wired up correctly and your code is correct.

#### **CHALLENGE**

Change your code to make the LED turn off.

HINT: you need to change the fourth code block.