Micro:bit Christmas Card



Ingredients

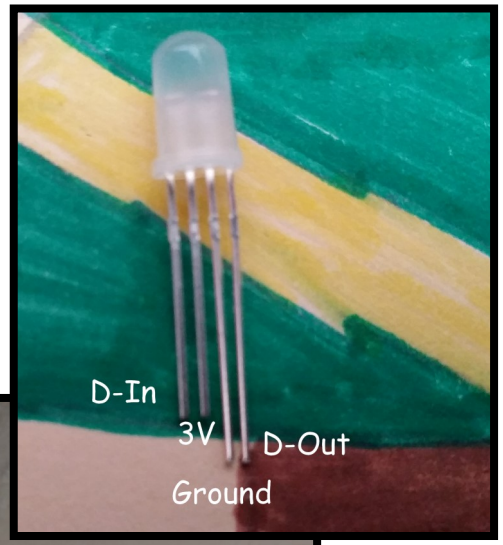
* 1 X Card
* Coloured crayons or felt tips
* 3 x crocodile clips
* 1 x Programmable LED (PL9823-F5)
* 5cm of Duct/Gaffer Tape
* 1 x BBC Micro:bit
* **https://www.youtube.com/watch?v=LX3-FKa8z0Y**

Step 1

- Draw a Christmas card and identify a place for your LED to go
- The cards stand up better in landscape mode when the wires are connected

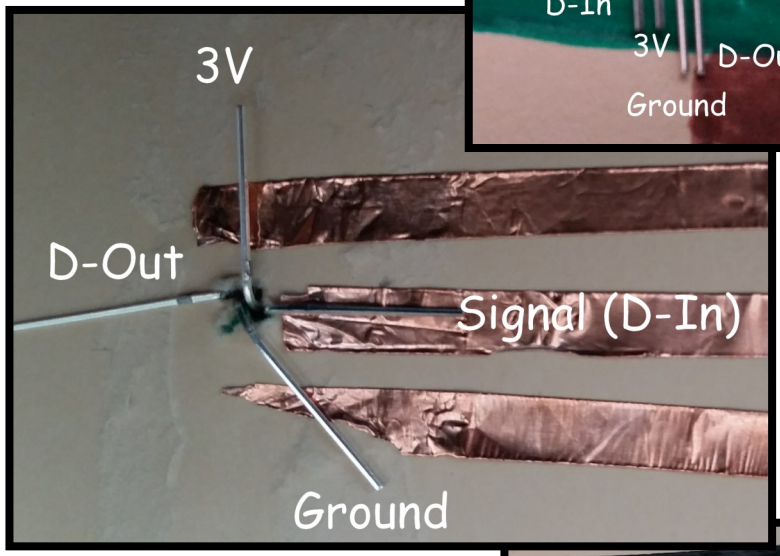
Step 2

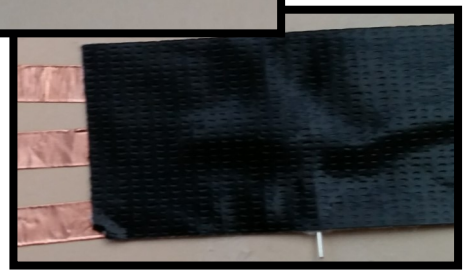
- Identify the pins on your LED



Step 3

- Place three lengths of copper tape along the card
- Push the LED through and lay the pins on the copper tape
- Stick it down to secure it





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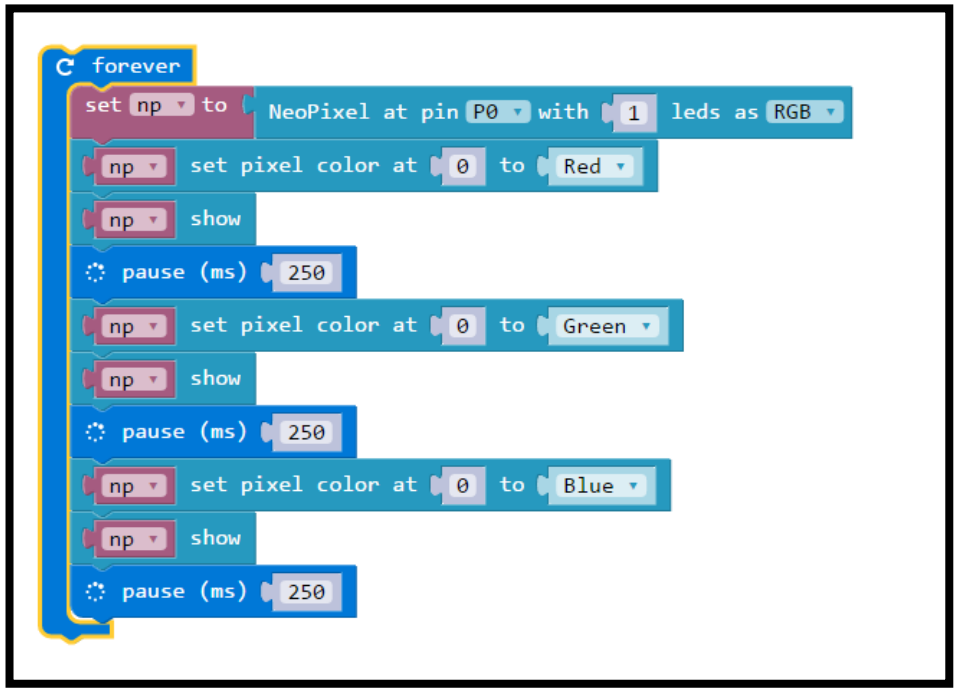
Writing the code Python

Don't forget to import the Neopixel Library

```
1  from microbit import *
2  import neopixel
3  np=neopixel.NeoPixel(pin0,1)
4  while True:
5          np[0] =(255,0,0)
6          np.show()
7          sleep(250)
8
9          np[0] =(0,255,0)
10         np.show()
11         sleep(250)
12
13         np[0] =(0,0,255)
14         np.show()
15         sleep(250)
```

Writing the code PXT

Don't forget to add the Neopixel Package



Challenge

1) Try to add different colours (PXT supports lots by name, how will you mange this in Python?)
2) Could you include multiple LEDs (You will need to connect the D-Out of the first to the D-in of the second when wiring)

Evaluation

During this process I leant to…….

Next time I will……

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