

# DRAWING WITH CODE

BY EDWARD MARTIN

## USEFUL LINKS

### FOR THE WORKSHOP

*P5.js Website:*

<https://p5js.org/>

*P5.js Editor:*

<https://editor.p5js.org/>

*P5.js References:*

<https://p5js.org/reference/>

### TO THE CODE

*Pig Code:*

<https://editor.p5js.org/edwardjmartin/sketches/9PDyg0OZ>

*Cat Code:*

<https://editor.p5js.org/edwardjmartin/sketches/3ulEjcsJ>

### FOR AFTER THE WORKSHOP

*P5.js Examples:*

<https://p5js.org/examples/>

*P5.js Tutorial Playlist on Youtube by Daniel Shiffman:*

<https://www.youtube.com/playlist?list=PLRqwX-V7Uu6Zy51Q-x9tMWlv9cueOFTFA>

## MORE INFORMATION

### KEY TERMS

#### *P5.js:*

The code editor used throughout the workshop, which allows us to write code in our internet browser.

#### *Code Editor:*

The programme that we write our code in.

#### *Javascript:*

The programming language often used when coding webpages on the internet.

#### *Syntax:*

The words, punctuation and statements we write that have certain rules and meanings associated to them, so that the computer can understand and run our code.

#### *Function:*

A section of our code that performs a specific task;  
eg. draw a rectangle - `rect(x, y, w, h);`

#### *Parameters:*

The information a computer needs to know to run a function;  
eg. Where and how big we want our rectangle.

#### *The 'function setup()':*

A default function given by P5.js, where we put the information that the computer only needs to know once.  
eg. How big we want our canvas to be.

#### *The 'function draw()':*

The default function given by P5.js where we write the body of our code, because it runs over and over, and continuously updates multiple times a second.

#### *The 'fill()' function:*

The function that adds colour to our shapes. We use either the preset colours built into P5.js - eg "pink", or we use the RGB (Red, Green, Blue) system - eg. `rgb(250, 130, 20);`

#### *The 'random()' function:*

The function that will give you a random value inside your code.  
eg. `random(0, 100);` - it might give me 65 or 3 or 48.

#### *Console:*

If we accidentally write our code wrong the console tells us that we have an error - what's wrong and which line in our code.