

## Drawing and Coloring Shapes

<1 min

We've learned a lot about what happens in the background when a p5.js sketch starts! The `setup()` function is automatically called, creating an HTML `<canvas>` element in our **index.html**. Now, let's learn how to use the p5.js library to draw two-dimensional shapes!

The p5.js sketch, or HTML `<canvas>` element, is a native HTML element that can be dynamically drawn to using JavaScript. The p5.js library provides a suite of drawing functions for common shapes and graphics that simplifies interacting with the canvas. In this lesson, we will explore the coordinate system that the canvas uses, p5.js shape and style functions, and how to create patterns using `for` loops.

In this this lesson, we will introduce the following shape functions:

- `point()` and `line()`
- `rect()` and `square()`
- `ellipse()` and `circle()`
- `triangle()` and `quad()`

We will also introduce how to change the style of shapes using:

- `stroke()` and `strokeWeight()`
- `fill()` and `noFill()`

Let's start by learning about the coordinate system that p5.js canvas uses!

### Instructions

On the right is a p5.js sketch of a repeating pattern made up of simple lines and shapes. By the end of this lesson, you will learn how to create your own patterns of shapes!

Click "Next" to learn about the coordinate system that p5.js canvas uses.

