



Introduction

LO: IWBAT to use P5-JS to create my very own first program.



WARM UP:

Play a game of Tic-Tac-Toe with a partner next to you.

- What are the rules of the game?
- What parts of the game are needed?
- How do you determine the winner?

Unit Plan



Game Based

By the end of this unit, you will be able to create a game like Tic-Tac-Toe on your device.

P5-JS

We will be programming in Javascript with an online editor known as P5-JS.



Tic-tac-Toe

[https://editor.p5js.org/cs4all](https://editor.p5js.org/cs4all/sketches/Bk3TOJzIE)
[/sketches/Bk3TOJzIE](https://editor.p5js.org/cs4all/sketches/Bk3TOJzIE)

Here's an example of what
your game could look like

P5-JS

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

Go to this website.



P5-JS Setup

01

Sign Up

Click Sign up on top right corner

02

Login

Click Login with Google

03

Google

Choose your School Google account o log in with

04

Title

Click the pen button next to the title and change the title to "Introduction"

05

Save

Click file and then save.

06

Questions

Ask any questions if you have issues setting this up.

Hello World

One of the very first programs that programmers create is a printout of "Hello, World!"

We will do just that in Javascript.

1. Delete all the current code on the screen.
2. Type in the following:
 - a. `document.write('Hello, World!');`
3. You should see a line of text that says "Hello, World!"
4. Congrats! You have created your 1st program



Comments

One of the best practices in coding is commenting your code, so that you and others can read very quickly what those lines of code do.

To do so, use "//"

Please comment out your code for "Hello, World!"

```
// the hello world program  
document.write('Hello, World!');
```


Variables

A **variable** is a named location that stores a value.

Values may be numbers, text, images, sounds, and other types of data. To store a value, you first have to declare a variable.

All JavaScript variables must be identified with unique names.

These unique names are called identifiers.

Identifiers can be short names (like `x` and `y`) or more descriptive names (age, sum, totalVolume).

JavaScript variables can hold numbers like 100 and text values like "John Doe".

Strings are written inside double or single quotes. Numbers are written without quotes.

Variable Example

```
var pi = 3.14;  
var person = "John Doe";  
var answer = 'Yes I am!';
```

Name

Store your first name as
"firstName" and last name as
"lastName"

Print

Print your first and last
name on separate lines. Use
"
" for a new line.

< sketch.js • Saved: 5 minutes ago Preview

1 // the hello world program

2 document.write('Hello, World!' + "
");

3

4 //Name

5 var firstName = "Big";

6 var lastName = "Mac";

7 document.write(firstName + "
");

8 document.write(lastName + "
");

9

10 //Concatenation

11 var name = firstName + " " + lastName;

12 document.write(name);

Hello, World!

Big

Mac

Big Mac



Exit Ticket

Biography

Using all the skills we learned today (variables, strings, print statements, comments, and concatenation). Write a brief summary about yourself. This could include:

- Age
- History
- Hobbies
- Likes/dislikes
 - etc