

Intro to JavaScript Class 1 Reference

JavaScript: a client-side processing language. A browser reads the code and runs it directly.
JavaScript lets you build dynamic webpages that respond to input from users.

How to add JavaScript

Above your closing `</body>` tag:

```
<script>
    alert('Hello World!');
</script>
```



As an external file in your `<head>` tag:

```
<script src="path/to/file.js"></script>
```

Variables

Variables can hold different types of information, like words, numbers, and collections of data.

Naming Variables: the variable name is case-sensitive, it needs to have a unique name

Declare a variable - `var numberOfKittens;` or `var numberOfKittens = 5;`

Use a variable - `var numberOfAnimals = numberOfKittens + numberOfPuppies;`

Arithmetic Operators

Example	Name	Result
-a	Negation	Opposite of a.
a + b	Addition	Sum of a and b.
a - b	Subtraction	Difference of a and b.
a * b	Multiplication	Product of a and b.
a / b	Division	Quotient of a and b.
a % b	Modulus	Remainder of a divided by b.

Functions - separable, reusable pieces of code.

Declare:

```
function turtleFact() {
    console.log('Hello World');
}
```

Then reuse: `turtleFact();`

You can pass variables into a function: `function addOne(inputNumber) { }`

You can also return values from a function:

```
function square(num) {
    return num * num;
}
console.log(square(4)); // outputs '16'.
var squareOfFive = square(5); // will make squareOfFive equal 25.
```

Reminders

- After each individual statement, you must add a semicolon.
- Return statement in a function will automatically end a function.
- When using variables in functions, variables do not need to have the same name as the function argument(s).