



TODAY'S SLIDES: <http://bit.ly/DPLjs1>

Comments

One line of comments

```
//Here is a single line of comments
```

Multiple lines of comments

```
/*If I want to leave multiple lines of comments  
I surround them with an asterisk and forward slash*/
```

Variables

To declare a variable:

```
var x;
```

To initialize a variable:

```
x = 'I'm a variable';
```

To initialize and declare simultaneously:

```
var x = 'I'm a variable';
```

Naming Variables

- begin with letters, `_`, or `$`
- names are case-sensitive
- standard to use camelCase (aLongName vs. a_long_name)
- can't use reserved words
- choose for clarity and meaning
- pick convention and stick with it

Data Types

The five "primitive" data types:

- **Strings:** a bunch of text.
- **Numbers:** can be whole or floating point
- **Boolean:** true or false
- **Undefined:** when a variable has been declared but hasn't been assigned a value
- **Null:** empty, but not unassigned

To find the data type of a variable

```
typeof varName
```

Expressions

An expression is any bit of code that evaluates to a single value. This lets you do math, combine text strings, and a lot more.

+	Addition	$2 + 2 = 4$
-	Subtraction	$2 - 2 = 4$
*	Multiplication	$2 * 2 = 4$
/	Division	$2 / 2 = 1$
%	Modulus (the remainder)	$5 \% 2 = 1$
++	Increment (+1)	$++2 = 3$
--	Decrement (-1)	$--2 = 1$

Functions: reusable collections of statements

To declare a function:

```
function myFunc() {  
    //a bunch of statements  
}
```

To call a function:

```
myFunc();
```

Functions can have arguments:

```
function sayMyName(name) {  
    console.log('Hi, ' + name);  
}
```

To call a function with arguments:

```
sayMyName('Nate');
```

Scope

- variables in JS are only visible inside the function they're declared in - they have "local scope"
- variables declared outside any function have "global scope" - they're visible to the rest of the script.

WHERE TO GET MORE HELP:

The CTC: come to the desk and ask for help, schedule a 1-on-1 tutoring lesson, come to more classes, or attend one of our open labs to answer your questions.

Mozilla Developer Network: exhaustive documentation on all things JavaScript, HTML, CSS, and more. developer.mozilla.org/en-US/docs/Web/JavaScript

Codecademy: free, online, and gamified courses in Javascript, HTML/CSS, PHP, Python, and Ruby. www.codecademy.com

Eloquent JavaScript: a great book on the basics of programming, using JavaScript, and the digital version is free: eloquentjavascript.net

Code Combat: learn to code in JavaScript by playing a game! codecombat.com