



# JAVASCRIPT CHEAT SHEET

- ▶ Programming language
- ▶ Strict syntax requirements
- ▶ Interpreted; object-oriented; dynamic typing
- ▶ Access web content (elements)
- ▶ Modify web content
- ▶ React to events
- ▶ Retrieve data without page reload (AJAX)

## PRIMITIVE DATA TYPES

Type	Example(s)	Falsey Value(s)
number	1, 3, 5.6, -284	0, -0, NaN
string	"hello", "Mr. F"	""
boolean	true, false	FALSE
null	null	null
undefined	undefined	undefined
symbol (ES6)	Symbol("first")	none

## SOME TYPE CONVERSIONS

<code>parseFloat("0.05")</code>	Convert string to floating point number
<code>parseInt("1000", 10)</code>	Convert string to integer number in base 10
<code>89.toString()</code>	Convert number to string

## OBJECTS

- ▶ used to store related data and methods
- ▶ key-value pairs
- ▶ syntax: { key: value, key2: value2 }
- ▶ dot notation: `obj.key = newValue;`
- ▶ bracket notation: `obj['key'] = newValue;`

```
pet = {
  name: 'Theo',
  bark: function(){
    console.log('woof!');
  },
  age: 3
}
```

## ARRAYS

- ▶ used to store sequential data
- ▶ integer keys (indices) starting from 0
- ▶ syntax: `[ el0, el1, el2 ]`
- ▶ bracket notation for indices: `arr[0] = 7;`

```
coinFlips = [0, 1, 1, 1, 0];
```

# PROGRAMMING CONCEPTS

variable	<code>var thing = 5;</code>	Store some data and give it a name for reuse.
conditional	<pre>if (size == 'large'){   price = 4.99; } else if (size == 'medium'){   price = 2.00; } else {   price = 1.29; }</pre>	Decide which line of code to run next based on current conditions.
loop	<pre>var j=10; while (j&gt;=0;){   console.log(j);   j=j-1; }</pre>	Repeat an action <u>while</u> a condition is true.
- initialization - continue condition - update	<pre>for (var k=10; k&gt;=0; k=k-1){   console.log(k); }</pre>	Repeat an action <u>for</u> each value in a sequence.
function	<pre>function add (num1, num2){   return num1 + num2; }</pre> <pre>add(6, 9);</pre>	Function definition: store some <u>behavior</u> and give it a name for reuse.  Function call: run the code now on specific values

## BOOLEAN COMPARISON OPERATORS

<code>==</code>	Equal to	<code>&gt;</code>	Greater than
<code>===</code>	Strict equal to	<code>&lt;</code>	Less than
<code>!=</code>	Not equal to	<code>&gt;=</code>	Greater than or equal to
<code>!==</code>	Strict not equal to	<code>&lt;=</code>	Less than or equal to

## BOOLEAN LOGICAL OPERATORS

<code>&amp;&amp;</code>	and
<code>  </code>	or
<code>!</code>	not