

JavaScript Basics

Primitives

Objectives

- Introduce the 5 primitive data types
- Work with numbers and numeric operators
- Work with strings and common string methods

5 Primitive Datatypes

//Numbers

4

9.3

-10

//Strings

"Hello World"

"43"

//Booleans

true

false

//null and undefined

null

undefined

Numbers

```
//Numbers
```

```
4
```

```
9.3
```

```
-10
```

```
//We can do some math
```

```
4 + 10      //14
```

```
1/5         //0.2
```

```
//Modulo - remainder operator
```

```
10 % 3      //1
```

```
24 % 2      //0
```

```
15 % 11     //4
```

Strings

```
//Single or Double quotes OK
```

```
"hello world"
```

```
'hello world'
```

```
//Concatenation
```

```
"charlie" + "brown" // "charliebrow"
```

```
//Escape Characters start with "\"
```

```
"Singin \"Do wah diddy, diddy, dum diddy do\" "
```

```
"This is a backslash: \\"
```

```
//Strings have a length property
```

```
"hello world".length //11
```

```
//Access individual characters using [] and an index
```

```
"hello"[0] // "h"
```

```
"hello"[4] // "o"
```

Quick Exercises!

Evaluate the following statements

```
//1.  
100 % 3
```

```
//2.  
("blah" + "blah")[6]
```

```
//3.  
"hello".length % "hi\\".length
```

Variables

```
//Variables are simply containers that store values
//They follow this pattern:
var yourVariableName = yourValue;
```

```
//They can store all of the values we've seen
var name = "Rusty";
var secretNumber = 73;
var isAdorable = true;
```

```
//Recall the stored value by calling the variable name
var name = "Rusty";
"hello there " + name      //"hello there Rusty"
```

```
var num = 37;
num + 3 + 10      //50
```

```
//We can also update existing variables
var name = "Robert";
name = "Bob";
```

Null and Undefined

```
//The two other primitives are null and undefined

//Variables that are declared but not
//initialized are undefined
//The following variables are undefined:
var name;
var age;

//null is "explicitly nothing"
var currentPlayer = "charlie";
currentPlayer = null;    //game over
```