JavaScript Cheat Sheet

Use this cheat sheet to keep helpful hints and snippets handy Handcrafted by Pam Selle*

Variables - A variable is a variable because it changes!

```
var oranges = 0;
var oranges = 'lots!';
var orangesAndBananas = 1;
```

Data Types - How we store information in JavaScript

| Strings | var bananas = "I have some bananas"; var oranges = 'Don\'t have oranges'; | Contained in quotes, quotes must match (single ' or double "). Escape quotes with \ |
|-----------|--|---|
| Numbers | var numberOfBananas = 5; var numberOfOranges = 0; | Hello old friends! |
| Boolean | var haveBananas = true; var haveOranges = false; | Value of true or false , no quotes |
| Undefined | var strawberries; | No value assigned to it yet |
| Null | var pumpkins = null; | No quotes; a purposely empty value (not the same as 0 or undefined) |

Mathematical Expressions

Comparisons

| + | Addition | === | Equality |
|----|------------------------------|-----|--------------------------|
| - | Subtraction | !== | Inequality |
| * | Multiplication | > | Greater than |
| 1 | Division | >= | Greater than or equal to |
| % | Modulus (remainder) | < | Less than |
| ++ | Increment (increase by 1) | <= | Less than or equal to |
| | Decrement (decrease by 1) | | |
| += | Add to value (ex. += 2) | | |
| -= | Subtract from value (ex -=3) | | |

Logical Operators and IF/ELSE

| && | and | <pre>var bananas = 5; var oranges = 2; if (bananas > 3 && oranges > 3){ console.log('Eat fruit!'); } else { console.log('Go with Plan B!'); }</pre> |
|----|-----|---|
| II | or | <pre>if (bananas < 2 oranges < 2){ console.log('Buy fruit!'); }</pre> |
| ! | not | <pre>if !(bananas >== 0){ console.log('How do you have negative bananas?'); }</pre> |

Functions

```
function sayHi() { // Defines a function with the name sayHi
  console.log('Hi!!');
}
sayHi(); // Call the function
```

While Loops

For Loops

```
 \begin{array}{ll} \text{var x = 0;} & \text{for (initialize; condition; update) } \{ \\ \text{while (x < 5) } \{ \\ \text{console.log(x);} \\ \text{x++;} \\ \} & \text{for (var i = 0; i < 5; i++) } \{ \\ \text{console.log(i);} \\ \} \\ \end{array}
```

Arrays

Bracket notation

```
var rainbow = ['Red', 'Orange',
    'Yellow', 'Green', 'Blue', 'Indigo',
    'Violet'];
var firstColor = rainbow[0];
var lastColor = rainbow[6];
rainbow[2] = "Brown";
```

Object Literal (Objects)

Dot notation – Accessing information

```
var kitten = {
    age: 1,
    name: "Fluffy",
    likes: ["yarn", "snuggles"],
    color: "grey"
};
var likes = kitten.likes;
kitten.name = "Furball";
```

Objects in Functions

```
var kitten = {
  name: "Fluffy",
  species: "cat"
}
function aboutMyPets(pet) {
  console.log(pet.name + " is my pet " + pet.species);
  }
}
aboutMyPets(kitten);
```

Functions in Objects (Methods)

```
var kitten = {
  name: "Fluffy",
  species: "cat",
  getName: function() {
    console.log(this.name);
  }
}
kitten.getName()
```