

JS LIST METHODS

Returns the number of items in an array or list

```
[1, 2, 3, 4].length  
  
<< 4
```

.length

Returns a string of all the elements concatenated with the specified argument.
Use template literals to avoid the brackets.

```
["h", "e", "l", "l", "o"].join`  
  << "hello"  
["h", "e", "l", "l", "o"].join("")  
  << "hello"  
["h", "e", "l", "l", "o"].join('-')  
  << "h-e-l-l-o"  
["h", "e", "l", "l", "o"].join`-`  
  << "h-e-l-l-o"
```

.join

Returns the same array, with every element having been passed through a specified function.

```
[1, 2, 3, 4].map((element, index) => element * index)  
<< [0, 2, 6, 12] // [1x0, 2x1, 3x2, 4x3]
```

.map()

Passes every element through a specified function that tests a condition. Returns an array with all the elements that meet the condition.

```
[1, 2, 3, 4].filter(element => element%2 === 0)  
<< [2, 4] // filters out odd numbers  
  
[1, 3, null, "hi", false].filter(Boolean)  
<< [1, 3, "hi"]
```

.filter()

IMPORTANT NOTE:

All methods that require functions as arguments have three inbuilt parameters: the element of the list, the index of the current element, and the array itself.

For example,

```
.map((element, index, array) => *magic* )
```

The parameters must be defined in that order, and you do not need all of them each time. However, you must have the element.

Returns a Boolean value, based on whether the list contains the element specified as an argument.

```
["h", "e", "l", "l", "o"].includes("h")  
  << true  
["h", "e", "l", "l", "o"].includes("f")  
  << false
```

.includes()

Returns the last element in a list

```
["my", "array"].pop()  
<< "array"
```

.pop()

Adds a specified element to the end of an array and returns the length of the new array

```
["h", "e", "l", "l"].push("o")  
<< 5
```

.push()

JAVASCRIPT LIST METHODS (CHEAT SHEET)

.reduce()

Passes each element of the list through a function. With every pass, the element contributes to building up a value. This value is defined at the start, and is returned once all elements have been passed through.

```
[1, 2, 3, 4, 5].reduce((sum, element) => sum + element, 0)  
<< 15 // 1 + 2 + 3 + 4 + 5
```

Note: unlike the other methods that use functions, the initial value must be defined as the parameter first (before element), and defined in a comma after the function.

.find()

Passes each element through a specified function, that tests a certain condition. Returns the first element that meets this condition.

```
[1, 2, 3, 4].find(element => element > 2)  
<< 3
```

.forEach()

Passes every element through a specified function, that performs an (or multiple) action(s). This works in place of a 'for' loop, for more inline coding.

```
[1, 2, 3, 4, 5].forEach(element => console.log(element*element))
```

.every()

Passes every element through a specified function that tests a condition. Returns a Boolean value depending on whether every element in the array meets the condition.

```
[1, 2, 3, 4].every(element => element === 1)  
<< false  
  
["o", "o", "o", "o"].every(element => element === "o")  
<< true
```

.indexOf()

Returns the index (position in array) of the first instance of a specified element.

```
["h", "e", "l", "l", "o"].indexOf("l")  
  << 2  
["h", "e", "l", "l", "o"].indexOf("k")  
  << -1
```

.some()

Passes every element through a specified function that tests a condition. Returns a Boolean value depending on whether AT LEAST ONE element in the array meets the condition