Array Iteration

Objectives

- Use a for loop to iterate over an array
- Use forEach to iterate over an array
- Compare and contrast for loops and forEach

For Loop

To loop over an array using a for loop, we need to make use of the array's *length* property

```
var colors = ["red", "orange", "yellow", "green"];

for(var i = 0; i < colors.length; i++) {
  console.log(colors[i]);
}
```

ForEach

JavaScript provides an easy built-in way of iterating over an array: ForEach

```
arr.forEach(someFunction)
```

```
var colors = ["red", "orange","yellow", "green"];

colors.forEach(function(color){
//color is a placeholder, call it whatever you want
  console.log(color);
});
```

For vs. ForEach

The following 2 code snippets do the same thing:

```javascript
//with a for loop
var colors = ["red", "orange", "yellow", "green"];

for(var i = 0; i < colors.length; i++) {
  console.log(colors[i]);
}
```

```javascript
//using forEach
var colors = ["red", "orange","yellow", "green"];

colors.forEach(function(color){
  console.log(color);
});
```

Exercise

What does the following code print out?

```javascript
var numbers = [1,2,3,4,5,6,7,8,9,10];
var colors = ["red", "orange", "yellow", "green"];

numbers.forEach(function(color){
  if(color% 3 === 0) {
   console.log(color);
  }
});
```