

# Iterables with Sets and Maps

using the entries, keys and values methods to play with iterables of keys or values

The `entries` method is defined on sets and maps. You can also use the `keys` and `values` method on a set or map to create an iterator/iterable of the keys or values. For example:

```
let colors = new Set( [ 'red', 'yellow', 'green' ] );
let horses = new Map( [
  [5, 'QuickBucks'],
  [8, 'Chocolate'],
  [3, 'Filippone']
] );

console.log( colors.entries() );
//> SetIterator {"red", "red"}, {"yellow", "yellow"}, {"green", "green"}}
```

```
console.log('\n')
console.log( colors.keys() );
//> SetIterator {"red", "yellow", "green"}
```

```
console.log( colors.values() );
//> SetIterator {"red", "yellow", "green"}
```

```
console.log( horses.entries() );
//> MapIterator {[5, "QuickBucks"], [8, "Chocolate"], [3, "Filippone"]}
```

```
console.log( horses.keys() );
//> MapIterator {5, 8, 3}
```

```
console.log( horses.values() );
//> MapIterator {"QuickBucks", "Chocolate", "Filippone"}
```



You don't need to create these iterators with the `keys`, `values`, or `entries` method though to perform an iteration on a set or a map. Sets and maps are iterable themselves. Therefore, they can be used in `for-of` loops.

A common destructuring pattern is to iterate the keys and values of a map using destructuring in a for-of loop:

map using destructuring in a for-of loop.

```
for ( let [key, value] of horses ) {  
  console.log( key, value );  
}
```



When creating a set or a map, you can pass any iterable as an argument, provided that the results of the iteration can form a set or a map:

```
let nineToOne = new Set( countdownIterable );  
console.log(nineToOne);  
  
let horses = new Map( [  
  [5, 'QuickBucks'],  
  [8, 'Chocolate'],  
  [3, 'Filippone']  
] );  
console.log(horses);
```



In the first example, we used a custom iterable, while in the second example, we used an array of key-value pairs.

Now, let's talk about the role of the iterable interface.