

JavaScript

Understanding How the Language Works

JavaScript

Arrays

- Variables hold one value
- Arrays can hold:
 - Many values
 - Values of any type
 - Other arrays (multi-dimensional)

JavaScript

Arrays

Declaring an array

- An array is an object that isn't a number or a string
- The size of an array can be specified when it is declared, or it can be omitted

```
<script language="JavaScript">
```

```
var names = new Array();  
var classes = new Array(5);
```

```
</script>
```

JavaScript

Arrays

Filling an array

- Set the values one at a time
- Set all values at the time that you declare it

```
<script language="JavaScript">
```

```
var names = new Array();  
names[1] = "Mark";  
names[2] = "John";
```

```
var names = new Array("Mark", "John");
```

```
</script>
```

JavaScript

Arrays

Accessing values

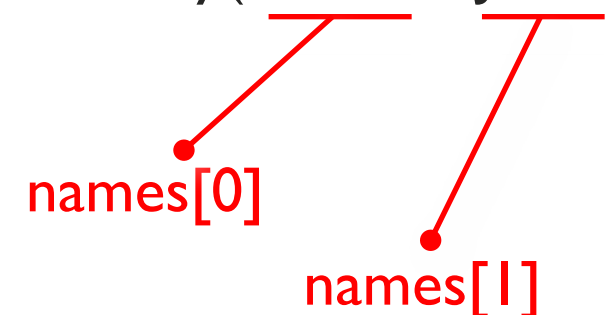
- Locations where values are kept are called Elements
- Use square brackets to specify an element
- Arrays start at element 0

```
<script language="JavaScript">
```

```
var names = new Array();  
names[1] = "Mark";  
names[2] = "John";
```

```
var names = new Array("Mark", "John");
```

```
</script>
```



JavaScript

Arrays

Multi-dimensional arrays

- Place an array as one of the objects within another array
- Reference the values with double square brackets

```
<script language="JavaScript">
```

```
var names = new Array(  
  new Array("Mark", "Fitzgerald"),  
  new Array("John", "Doe"),  
  new Array("Jane", "Citizen"));
```

```
alert(names[1][1]); // Displays 'Doe'
```

```
</script>
```