

JavaScript Functions

JavaScript **Functions**

- User-created **block of code** designed to perform a particular task.
- To Use the FUNCTION: **CALL (invoke) IT.**

Why use Functions?

- You can **reuse code**.

JavaScript Function Name Rules

- Same rules as VARIABLES.

Function Syntax

```
function functionName( )  
    {  
    code to be executed  
    }
```

Function Syntax – with **return** statement

```
function functionName( )  
    {  
    code to be executed  
    return statement  
    }
```

****return statement
breaks out of the function
returns back to where
function was called**

Function Syntax (with **parameters** passed into function)

```
function functionName(parameter1, parameter2, etc....)
{
  code to be executed
  return statement
}
```

Function Syntax (with **arguments** passed into function)

```
function functionName(arguments1, arguments2, etc....)
{
  code to be executed
  return statement
}
```

Example 1: The function is called in an innerHTML assignment statement.

```
<p id="demo"></p>
```

```
<script>
```

```
function myFunction(p1, p2)
```

```
{
```

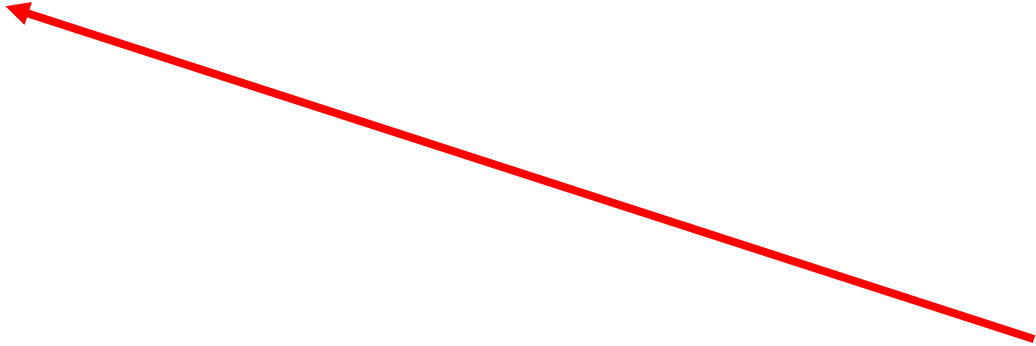
```
    return p1 * p2;
```

```
}
```

```
document.getElementById("demo").innerHTML = myFunction(4, 3);
```

```
</script>
```

****function is called,
parameters are passed
to the function,
return something
back to where the
function was called**



Function to Convert Fahrenheit to Celsius

<p id="demo"></p>

<script>

function **toCelsius**(f)

{

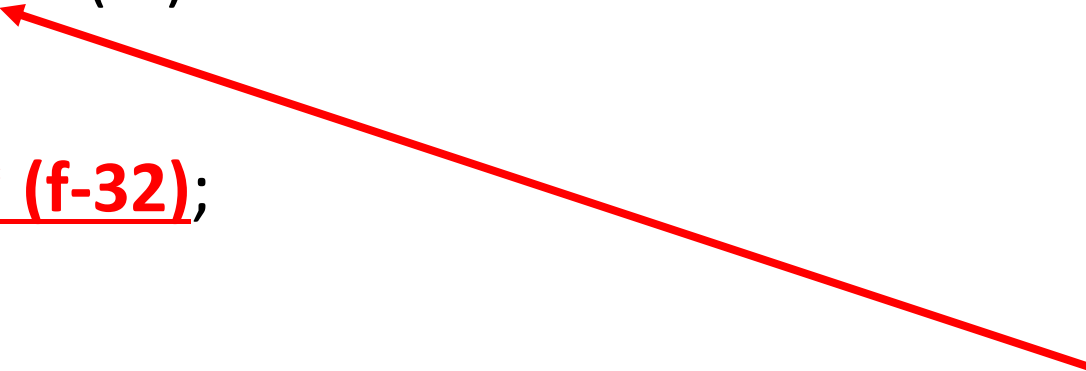
 return (5/9) * (f-32);

}

document.getElementById("demo").innerHTML = **toCelsius**(77);

</script>

Call the function
Pass arguments to the function
Calculate inside the function
Return the answer



Function to Convert Fahrenheit to Celsius

<p id="temp"></p>

<script>

document.getElementById("temp").innerHTML = "The temperature is " + toCelsius(77) + " Celsius";

function toCelsius(f)

{

 return (5/9) * (f-32);

}

</script>

****Same as the previous slide
Except a more descriptive
output**

Function to Calculate Circumference of a Circle

<p id="circle"></p>

<script>

document.getElementById("circle").innerHTML = "The Circumference of a Circle is " + circumferenceOfCircle(4) ;

function circumferenceOfCircle(radius)

{
 return 2 * 3.14 * radius;
}

</script>

****Same as the previous slide
Except a more descriptive output**

Function to Calculate Circumference & Area of a Circle

```
<p id="circle"></p>
```

```
<p id="area"></p>
```

```
<script>
```

```
document.getElementById("circle").innerHTML = "The Circumference of a Circle is " + circumferenceOfCircle(4);
```

```
document.getElementById("area").innerHTML = "The Area of a Circle is " + areaOfCircle(4);
```

****Continued on next slide**

```
function circumferenceOfCircle(radius)
{
    return 2 * 3.14 * radius;
}
```

```
function areaOfCircle(radius)
{
    return 3.14 * radius * radius;
}
```

</script>