

1. In the following declaration, what is the type of the variable 'pi'?

1 / 1 point

```
var pi = "3.14";
```

- ☐ float
- ☐ number
- ☐ char
- ☒ string

✓ **Correct**

Correct. Variables in JavaScript assumes the data type from of a variable when it's assigned, meaning in this case `pi` is the same type as "3.14". Since "3.14" contains multiple characters in quotation marks, it is a string. Refer to the "JavaScript Language - Overview and Syntax" and "JavaScript Variables and Control Statements" videos for more information.

2. How do you define an array called array1 in JavaScript?

1 / 1 point

- ☐ var array1 = (1,2,3)
- ☒ var array1 = [1,2,3]
- ☐ var array1 = new Array((1,2,3))
- ☐ var array1 = new Array[1,2,3]

✓ **Correct**

Correct. Array literals are created by declaring array elements within square brackets, as shown above. Refer to the "JavaScript Language - Overview and Syntax" video for more information.

4. Which DOM function returns a node object matching a div with an id value "example_id"?

1 / 1 point

- ☐ `div.getValueOf("example_id")`
- ☒ `document.getElementById("example_id")`
- ☐ `element.getNodeById("example_id")`
- ☐ `document.getElementById(div, "example_id")`

✓ **Correct**

Correct. To get an object given a specified id, the `document.getElementById()` method should be used. This looks for a specific id, and does not differentiate between the different tags. Refer to the "JavaScript DOM Objects" video for more information.

5. How are numbers converted to strings?

1 / 1 point

- ☐ `(123).string`
- ☒ `(123).toString()`
- ☐ `toString(123)`
- ☐ `string(123)`

✓ **Correct**

Correct. Converting a value to a String requires calling the "toString" method on the object (in this case numbers) and providing no arguments. Refer to the "JavaScript Language - Overview and Syntax" video for more information.

6. What is the value of `total` after the following statement is executed?

1 / 1 point

```
var total = 10 + 1 + "3";
```

- ☒ "113"
- ☐ "1013"
- ☐ 14
- ☐ This results in an error

✓ Correct

Correct. JavaScript will execute this statement in order. 10 and 1 are both numbers and will be added as such ($10 + 1 = 11$). Then, this new value (11) will be concatenated with the string "3", resulting in "113". Refer to the "JavaScript – Browser Console" reading for more information.

7. What would the alert be, when the following code is executed?

1 / 1 point

```
var a = new String("Hello");
```

```
var b = "Hello";
```

```
if (a===b){
```

```
  alert("Same");
```

```
}else{
```

```
  alert("Different");
```

```
}
```

- ☐ Same
- ☒ Different
- ☐ It would not give any alert as it is an error
- ☐ None of the above

✓ Correct

Correct. The `===` operation checks if the operand on the left is of **equal value** and **equal type** to the operand on right. Since Strings declared by the String wrapper object are different than the primitive string data type, `a`` and `b`` are different types, despite them being the same values. Refer to the "JavaScript Language - Overview and Syntax" video and the "JavaScript – Browser Console" reading for more information.

8. Which of the following is the proper way to create a `for`` loop?

1 / 1 point

- ☐ loop (for i = minVal; i < maxVal; i++) { ... }
- ☐ for (i < maxVal) { ... }
- ☐ for (var i = minVal; i++; i < maxVal) { ... }
- ☒ for (var i = minVal; i < maxVal; i++) { ... }

✓ Correct

Correct. A for loop requires 3 expressions within the parentheses: an initial expression, a conditional expression, and an increment expression. The expressions must appear in the order listed, and must be separated by a semi-colon (;), as shown in this example. Refer to the "JavaScript Variables and Control Statements" video for more information.

9. Select **all** of the following which are *proper* ways to add a `color`` property to a custom `Car`` object.

☐ modify the code of the Car object directly to add a `color`` parameter in the constructor

☒ `Car.prototype.color = "Red"`

☒ **Correct**

Correct. All objects have a corresponding prototype, which make it easy to add properties and methods to all current and future instances of that object. Above is the correct usage of adding a property to a prototype. Refer to the "JavaScript Functions and Prototypes" video for more information.

10. Which of the following is not an event binder in JavaScript?

1 / 1 point

☐ `onload`

☒ `onhover`

☐ `onmouseover`

☐ `onclick`

☒ **Correct**

Correct. Onhover is not a valid event in JavaScript. A different event binder is used for when a user hovers over an element. Refer to the "Client-Side Javascript with HTML" video for more information.