# Randomly Selected Questions - Set 2

**Question 1 (ID: 3.8.3):** Short Answer: What does the method `push()` do in the context of arrays?

**Question 2 (ID: 4.1.1):** Multiple Choice: What is represented by a Date object in JavaScript?  
- (A) Current date and time as a string  
- (B) The number of seconds since the Unix Epoch  
- (C) A single moment in time based on the number of milliseconds since the Unix Epoch  
- (D) A formatted date string in local time zone

**Question 3 (ID: 1.9.6):** Fill in the blank: To specify a cell that spans across multiple columns, use the \_\_\_\_\_\_\_ attribute in the <td> or <th> element.

**Question 4 (ID: 3.4.1):** Multiple Choice: Which of the following values is considered a truthy value in JavaScript?   
- (A) 0   
- (B) ""   
- (C) NaN   
- (D) "cat"

**Question 5 (ID: 2.3.5):** Multiple Choice: Which CSS property allows elements to flow around floated objects?  
- (A) display  
- (B) opacity  
- (C) float  
- (D) clear

**Question 6 (ID: 4.6.1):** Multiple Choice: Which HTML element is used to include JavaScript code within an HTML document?  
- (A) <style>  
- (B) <script>  
- (C) <link>  
- (D) <div>

**Question 7 (ID: 4.7.1):** Multiple Choice: What is the root node of a DOM tree created from the HTML document?  
- (A) <title>  
- (B) <body>  
- (C) <html>  
- (D) <head>

**Question 8 (ID: 4.7.6):** Multiple Choices: Which of the following HTMLCollection methods would you use to access the first element in a search?   
- (A) length()  
- (B) querySelector()  
- (C) [0]  
- (D) item()

**Question 9 (ID: 1.7.7):** Multiple Choice: How can a hyperlink be set to open in a new tab or window by using the `target` attribute?  
- (A) `target="\_new"`  
- (B) `target="\_blank"`  
- (C) `target="\_self"`  
- (D) `target="\_window"`

**Question 10 (ID: 1.1.6):** Multiple Answers: Which of the following are top-level domains (TLDs)?  
- (A) .com  
- (B) .net  
- (C) .edu  
- (D) .jpg

**Question 11 (ID: 1.7.8):** Fill in the blanks: A graphical hyperlink, or image link, uses an \_\_\_\_\_\_\_ inside a hyperlink instead of text. The attribute used to describe the image for accessibility is \_\_\_\_\_\_\_.

**Question 12 (ID: 4.2.2):** Fill in the Blank: The RegExp method \_\_\_\_\_\_\_\_ returns true if the string matches the regex, and false otherwise.

**Question 13 (ID: 4.8.3):** Fill in the Blank: The method \_\_\_\_\_\_\_\_ is used to create a new text node containing specified text in the DOM.  
- createTextNode()

**Question 14 (ID: 3.9.3):** Multiple Choice: Which code snippet successfully changes the `published` year of the `book` object to 2014?  
- (A) `book.Published = 2014;`  
- (B) `book.published = 2014;`  
- (C) `book.published 2014;`  
- (D) `published.book = 2014;`

**Question 15 (ID: 3.5.5):** Multiple Choice: How does a do-while loop differ from a while loop?  
- (A) A do-while loop is the same as a while loop.  
- (B) A do-while loop checks the condition before executing the loop body.  
- (C) A do-while loop executes the loop body before checking the condition.  
- (D) A do-while loop cannot be used for infinite loops.

**Question 16 (ID: 4.4.7):** Fill in the blank: To ensure secure transmission of form data containing passwords, the form should use \_\_\_\_\_\_\_ URLs.

**Question 17 (ID: 3.9.10):** Multiple Choice: After executing the `changeThings` function, what is the value of `rectangle.width`?  
- (A) 3  
- (B) 5  
- (C) 20  
- (D) 33

**Question 18 (ID: 4.11.7):** Multiple Choice: When should the JavaScript parseFloat() function be used in form validation?  
- (A) To convert string input to a boolean  
- (B) To check if input is an array  
- (C) To convert string input to a float for numerical validation  
- (D) To apply CSS styles conditionally

**Question 19 (ID: 3.2.6):** Short Answer: What is the precedence order for the following arithmetic operations in JavaScript: division, addition, parentheses, and multiplication?

**Question 20 (ID: 4.11.2):** Fill in the Blank: Data validation can either be performed while the user enters form data by adding a JavaScript function as the \_\_\_\_\_\_\_\_\_\_ handler or immediately prior to submitting the entire form as the form's \_\_\_\_\_\_\_\_\_\_ handler.

**Question 21 (ID: 4.6.5):** Multiple Answers: Which window object methods can display a dialog box to the user? (Select all that apply)  
- (A) window.alert()  
- (B) window.confirm()  
- (C) window.open()  
- (D) console.log()

**Question 22 (ID: 2.2.8):** Short Answer: Explain what a descendant selector is and provide an example.

**Question 23 (ID: 1.1.5):** Multiple Choice: When a computer sends a packet to a domain name, what is the first step taken?  
- (A) Sending the packet to a random server  
- (B) Contacting a browser history  
- (C) Contacting a DNS server to resolve an IP address  
- (D) Storing the packet temporarily

**Question 24 (ID: 1.2.7):** Multiple Answers: Which of the following are minimal parts of an HTML document as defined by the HTML Living Standard? (Select all that apply)  
- (A) `<DOCTYPE html>`  
- (B) `<head>`  
- (C) `<body>`  
- (D) `<footer>`

**Question 25 (ID: 1.2.1):** Multiple Choice: What does the acronym HTML stand for?  
- (A) HyperText Module Language  
- (B) HyperText Markup Language  
- (C) HyperTransfer Markup Language  
- (D) HyperTransfer Module Language

**Question 26 (ID: 1.7.1):** Multiple Choice: What is the main function of the `<a>` element in HTML?  
- (A) To define a section in a webpage  
- (B) To include a script file  
- (C) To display an image  
- (D) To create a hyperlink

**Question 27 (ID: 3.6.1):** Multiple Choice: What is a function in JavaScript?  
- (A) A collection of HTML elements  
- (B) A named group of statements  
- (C) A type of database  
- (D) A styling method in CSS

**Question 28 (ID: 4.9.5):** Multiple Choice: Which of these HTML tags is commonly used to embed an event handler in the document directly?  
- (A) <p onclick="myFunction()">  
- (B) <p>  
- (C) <div>  
- (D) <button>

**Question 29 (ID: 3.3.10):** Fill in the Blank: Using braces around single statements in if or else blocks in JavaScript is considered \_\_\_\_\_\_\_ practice as it results in more readable code and is less susceptible to logic errors.

**Question 30 (ID: 2.1.9):** Fill in the Blank: When a CSS conflict occurs between a parent and child element, the \_\_\_\_\_\_\_\_\_\_ element's declaration will take precedence.

**Question 31 (ID: 3.10.7):** Multiple Choice: What method adds a new key/value pair to a `Map` object or updates the value if the key already exists?  
- (A) add()  
- (B) append()  
- (C) set()  
- (D) update()

**Question 32 (ID: 4.9.4):** Short Answer: What does the term "event handler" refer to in web development?

**Question 33 (ID: 4.6.2):** Fill in the blank: The Document Object Model (DOM) is created from a document's \_\_\_\_\_\_.

**Question 34 (ID: 2.4.3):** Multiple Choice: What is a family name in the context of CSS font properties?  
- (A) The general group of fonts like serif or sans-serif  
- (B) The specific name of a font like "Times New Roman"  
- (C) The shorthand property to define multiple font features  
- (D) The default fallback font used by browsers

**Question 35 (ID: 4.6.4):** Multiple Choice: Which window object property is useful for determining if the webpage is loaded with HTTPS or HTTP?  
- (A) window.location  
- (B) window.navigator  
- (C) window.innerHeight  
- (D) window.innerWidth

**Question 36 (ID: 4.2.6):** Multiple Answers: Which of the following regex patterns match the string "able"?  
- (A) /a.b/  
- (B) /a\Wb/  
- (C) /a\.b/  
- (D) /a\wb/

**Question 37 (ID: 4.6.9):** Multiple Choice: Which attribute, when used with the <script> tag, causes the browser to continue reading HTML without waiting for the JavaScript file to load?  
- (A) defer  
- (B) type  
- (C) async  
- (D) src

**Question 38 (ID: 2.3.2):** Fill in the blank: A color specified using the format #RRGGBB is called a \_\_\_\_\_\_\_\_\_\_ color.

**Question 39 (ID: 4.10.8):** Short Answer: Write the JavaScript code that changes the font family of a span element to "Arial" using the setProperty method.

**Question 40 (ID: 3.11.5):** Multiple Answers: Which methods can be used to extract substrings from a string? (Select all that apply)  
- (A) substr()  
- (B) substring()  
- (C) slice()  
- (D) extract()

**Question 41 (ID: 4.6.7):** Fill in the Blank: Minified JavaScript is typically stored in a file with a \_\_\_\_\_\_ file extension.

**Question 42 (ID: 4.10.6):** Short Answer: What is the JavaScript equivalent of the CSS property name "background-color"?

**Question 43 (ID: 3.3.6):** Multiple Choice: What output is logged to the console with the following code snippet?  
```  
let age = 6;  
if (age % 2 == 0) {  
 console.log("age is even");  
} else {  
 console.log("age is odd");  
}  
```  
- (A) "age is odd"   
- (B) "age is even"

**Question 44 (ID: 4.9.10):** Fill in the Blank: In HTML, the attribute used to register a handler that adds "on" to the event name, such as "onmousemove", is known as a(n) \_\_\_\_\_\_\_\_\_\_.

**Question 45 (ID: 4.4.4):** Multiple Choice: Which attribute allows users to select more than one option in a list box?  
- (A) size  
- (B) multiple  
- (C) value  
- (D) type

**Question 46 (ID: 1.8.10):** Multiple Choice: If you were to add a government logo and search box to the top of a webpage, which container should you place them in?  
- (A) <nav>  
- (B) <footer>  
- (C) <header>  
- (D) <main>

**Question 47 (ID: 3.11.6):** Fill in the blank: The method \_\_\_\_\_\_\_\_ replaces a specified value with another value in a string and returns the modified string.

**Question 48 (ID: 3.7.5):** Multiple Answers: In the following code snippet, which variables will throw a ReferenceError when accessed outside their respective functions?  
```javascript  
function example() {  
 var a = 10;  
 let b = 20;  
}  
console.log(a);  
console.log(b);  
```  
- (A) a  
- (B) b  
- (C) Both a and b  
- (D) Neither

**Question 49 (ID: 4.7.5):** Multiple Choice: Which DOM method returns a single node rather than an array?  
- (A) document.getElementsByTagName  
- (B) document.querySelectorAll  
- (C) document.getElementById  
- (D) document.getElementsByClassName

**Question 50 (ID: 4.1.7):** Multiple Answers: Which of the following are valid methods to set properties in a Date object?  
- [ ] setDay()  
- [ ] setFullYear()  
- [ ] setMonth()  
- [ ] setTimezone()

# Answers

**Answer to Question 1:** The `push()` method adds a value to the end of the array.

**Answer to Question 2:** (C) A single moment in time based on the number of milliseconds since the Unix Epoch

**Answer to Question 3:** colspan

**Answer to Question 4:** (D) "cat"

**Answer to Question 5:** (D) clear

**Answer to Question 6:** (B) <script>

**Answer to Question 7:** (C) <html>

**Answer to Question 8:** (C) [0]

**Answer to Question 9:** (B) `target="\_blank"`

**Answer to Question 10:** (A) .com, (B) .net, (C) .edu

**Answer to Question 11:** image, alt

**Answer to Question 12:** test

**Answer to Question 13:** createTextNode()

**Answer to Question 14:** (B) `book.published = 2014;`

**Answer to Question 15:** (C) A do-while loop executes the loop body before checking the condition.

**Answer to Question 16:** HTTPS

**Answer to Question 17:** (C) 20

**Answer to Question 18:** (C) To convert string input to a float for numerical validation

**Answer to Question 19:** Parentheses, Multiplication, Division, Addition

**Answer to Question 20:** change; submit

**Answer to Question 21:** (A) window.alert(), (B) window.confirm()

**Answer to Question 22:** A descendant selector matches elements that are contained within another specified element. Example: "div p" selects all <p> elements inside a <div> element.

**Answer to Question 23:** (C) Contacting a DNS server to resolve an IP address

**Answer to Question 24:** (A) `<DOCTYPE html>`, (B) `<head>`, (C) `<body>`

**Answer to Question 25:** (B) HyperText Markup Language

**Answer to Question 26:** (D) To create a hyperlink

**Answer to Question 27:** (B) A named group of statements

**Answer to Question 28:** (A) <p onclick="myFunction()">

**Answer to Question 29:** good

**Answer to Question 30:** child

**Answer to Question 31:** (C) set()

**Answer to Question 32:** An event handler is a piece of code that runs in response to a specific event occurring on a webpage, such as a user action or a network response.

**Answer to Question 33:** HTML

**Answer to Question 34:** (B) The specific name of a font like "Times New Roman"

**Answer to Question 35:** (A) window.location

**Answer to Question 36:** (A) /a.b/ [The character "." matches any character]

**Answer to Question 37:** (C) async

**Answer to Question 38:** hexadecimal

**Answer to Question 39:** span.style.setProperty("fontFamily", "Arial");

**Answer to Question 40:** (A) substr(), (B) substring()

**Answer to Question 41:** ".min.js"

**Answer to Question 42:** backgroundColor

**Answer to Question 43:** (B) "age is even"

**Answer to Question 44:** Event attribute

**Answer to Question 45:** (B) multiple

**Answer to Question 46:** (C) <header>

**Answer to Question 47:** replace

**Answer to Question 48:** (C) Both a and b

**Answer to Question 49:** (C) document.getElementById

**Answer to Question 50:** [ ] setFullYear() [ ] setMonth()