



# JavaScript 100-Question Quiz

1. What does `typeof 42` return?

- A. `"int"`
- B. `"number"`
- C. `"integer"`
- D. `"numeric"`

**Correct answer: B**

**Explanation:** In JavaScript, all numeric values (integers and floats) share the type `"number"`.

---

2. What is the result of `typeof null`?

- A. `"null"`
- B. `"undefined"`
- C. `"object"`
- D. `"value"`

**Correct answer: C**

**Explanation:** This is a long-standing JavaScript quirk: `typeof null` returns `"object"` even though `null` is a primitive.

---

3. What will `console.log(1 + "2")` output?

- A. 3
- B. "3"
- C. "12"
- D. NaN

**Correct answer: C**

**Explanation:** When adding a number and a string, JavaScript converts the number to a string and concatenates, resulting in "12".

---

4. What does `NaN` stand for?

- A. Not a Null
- B. Not a Number
- C. Negative a Number
- D. No actual Number

**Correct answer: B**

**Explanation:** `NaN` stands for "Not a Number" and represents an invalid numeric result (e.g., `0 / 0`).

---

5. Which of these is not a primitive type in JavaScript?

- A. `string`
- B. `boolean`
- C. `object`
- D. `symbol`

**Correct answer: C**

**Explanation:** `object` is not primitive. Primitive types are `string`, `number`, `boolean`, `null`, `undefined`, `symbol`, and `bigint`.

---

6. What will `typeof undefined` return?

- A. `"null"`
- B. `"undefined"`
- C. `"object"`
- D. `"void"`

**Correct answer: B**

**Explanation:** The primitive value `undefined` has the type `"undefined"`.

---

**7. Which operator is used for strict equality comparison?**

- A. `==`
- B. `=`
- C. `===`
- D. `=>`

**Correct answer: C**

**Explanation:** `===` compares both value and type, with no type coercion. `==` allows coercion.

---

**8. What is the result of `"5" == 5`?**

- A. `true`
- B. `false`
- C. `NaN`
- D. Throws an error

**Correct answer: A**

**Explanation:** `==` coerces types, so the string `"5"` is converted to number `5`, making the comparison `true`.

---

**9. What is the result of `"5" === 5`?**

- A. `true`
- B. `false`
- C. `NaN`
- D. Throws an error

**Correct answer: B**

**Explanation:** Strict equality (`===`) compares type and value, and `"5"` (string) is not the same type as `5` (number).

---

**10. Which keyword declares a block-scoped variable?**

- A. `var`
- B. `let`

- C. `const`
- D. Both B and C

**Correct answer: D**

**Explanation:** Both `let` and `const` are block-scoped; `var` is function-scoped.

---

**11. What happens if you access a variable declared with `let` before its declaration?**

- A. Returns `undefined`
- B. Throws a `ReferenceError`
- C. Returns `null`
- D. Returns an empty string

**Correct answer: B**

**Explanation:** `let` and `const` are in the temporal dead zone before declaration and cause a `ReferenceError` when accessed.

---

**12. What will this code log?**

```
console.log(a);  
var a = 10;
```

- A. `10`
- B. `undefined`
- C. `null`
- D. `ReferenceError`

**Correct answer: B**

**Explanation:** `var` is hoisted with an initial value of `undefined`, so the log shows `undefined`.

---

**13. What will this code log?**

```
console.log(b);  
let b = 10;
```

- A. `10`
- B. `undefined`
- C. `null`
- D. `ReferenceError`

**Correct answer: D**

**Explanation:** `let` is hoisted but not initialized, causing a `ReferenceError` if accessed before the declaration.

---

#### 14. What is a closure?

- A. A way to close opened files
- B. A function bundled with its lexical environment
- C. A function that always returns another function
- D. A method to end a program

**Correct answer: B**

**Explanation:** A closure is created when an inner function retains access to variables from its outer function's scope, even after the outer function has returned.

---

#### 15. Which array method adds one or more elements to the end of an array?

- A. `push()`
- B. `pop()`
- C. `shift()`
- D. `unshift()`

**Correct answer: A**

**Explanation:** `push()` appends elements to the end; `pop()` removes from end, `shift()` from start, `unshift()` adds to start.

---

#### 16. Which array method creates a new array without modifying the original?

- A. `push()`
- B. `splice()`
- C. `slice()`
- D. `pop()`

**Correct answer: C**

**Explanation:** `slice()` returns a new array containing a portion of the original; `splice()` mutates the original.

---

#### 17. What is the result of `[1, 2, 3].length`?

- A. 2
- B. 3
- C. 4
- D. undefined

**Correct answer: B**

**Explanation:** The `length` property returns the number of elements in the array, which is 3.

---

## 18. Which method converts a JSON string into an object?

- A. `JSON.encode()`
- B. `JSON.parse()`
- C. `JSON.stringify()`
- D. `JSON.toObject()`

**Correct answer: B**

**Explanation:** `JSON.parse()` parses a JSON string into a JavaScript object; `JSON.stringify()` does the opposite.

---

## 19. What is the output?

```
console.log(0 == false);
```

- A. `true`
- B. `false`
- C. `NaN`
- D. Throws error

**Correct answer: A**

**Explanation:** `==` performs type coercion; `false` is coerced to `0`, so the comparison is `true`.

---

## 20. What is the output?

```
console.log(0 === false);
```

- A. `true`
- B. `false`
- C. `NaN`
- D. Throws error

**Correct answer: B**

**Explanation:** Strict equality compares type and value; `0` (number) and `false` (boolean) are different types.

---

**21. How do you write an arrow function that returns the square of `x`?**

- A. `x => { x * x }`
- B. `x => x * x`
- C. `(x) => return x * x`
- D. `x -> x * x`

**Correct answer: B**

**Explanation:** For single-expression arrow functions, you can omit braces and `return`; the expression result is returned.

---

**22. What will this output?**

```
console.log(typeof (() => {}));
```

- A. `"function"`
- B. `"object"`
- C. `"arrow"`
- D. `"undefined"`

**Correct answer: A**

**Explanation:** Arrow functions are still functions in JavaScript, so `typeof` returns `"function"`.

---

**23. Which of these is not a valid way to define a function?**

- A. Function declaration
- B. Function expression
- C. Arrow function
- D. Class function literal

**Correct answer: D**

**Explanation:** "Class function literal" is not a standard term. Functions can be defined via declarations, expressions, or arrow syntax.

---

**24. What does `Array.isArray(value)` do?**

- A. Checks if value is iterable
- B. Checks if value is an array
- C. Checks if value is an object
- D. Converts value to array

**Correct answer: B**

**Explanation:** `Array.isArray()` returns `true` only when the value is an actual array.

---

**25. What is the value of `Number("hello")`?**

- A. `"hello"`
- B. `NaN`
- C. `0`
- D. `undefined`

**Correct answer: B**

**Explanation:** Converting a non-numeric string to number results in `NaN`.

---

**26. Which of these is falsy?**

- A. `"0"`
- B. `[]`
- C. `{}`
- D. `""`

**Correct answer: D**

**Explanation:** The empty string `""` is falsy; `"0"`, `[]`, and `{}` are truthy.

---

**27. Which keyword stops a loop immediately?**

- A. `exit`
- B. `stop`
- C. `break`
- D. `return`

**Correct answer: C**

**Explanation:** `break` exits the nearest loop or switch statement.

---



**28. Which keyword skips the current iteration of a loop and continues with the next?**

- A. `skip`
- B. `next`
- C. `continue`
- D. `pass`

**Correct answer: C**

**Explanation:** `continue` stops the current iteration and moves to the next one in the loop.

---

**29. What is the result?**

```
console.log("5" - 2);
```

- A. `"52"`
- B. `3`
- C. `NaN`
- D. `"3"`

**Correct answer: B**

**Explanation:** The `-` operator triggers numeric coercion; `"5"` becomes number `5`, so `5 - 2` is `3`.

---

**30. What is the result?**

```
console.log("5" + 2);
```

- A. `"52"`
- B. `7`
- C. `NaN`
- D. `"7"`

**Correct answer: A**

**Explanation:** `+` acts as string concatenation when one operand is a string, resulting in `"52"`.

---

**31. What is `window` in a browser?**

- A. A built-in array
- B. The global object for browser JavaScript

- C. A reserved variable name for DOM nodes
- D. A CSS object

**Correct answer: B**

**Explanation:** In browsers, the global scope is represented by the `window` object, which holds global variables and APIs.

---

**32. In strict mode ("`use strict`"), what happens if you assign to an undeclared variable?**

- A. It creates a global variable
- B. It creates a local variable
- C. It throws a `ReferenceError`
- D. It is silently ignored

**Correct answer: C**

**Explanation:** Strict mode prevents implicit global variable creation and throws a `ReferenceError`.

---

**33. How do you enable strict mode in a script file?**

- A. `enable strict`;
- B. `"use strict"`; at the top
- C. `use strict`; without quotes
- D. `strict_mode(true)`;

**Correct answer: B**

**Explanation:** The directive `"use strict"`; at the top of a script or function enables strict mode.

---

**34. What is the output?**

```
console.log([ ] == false);
```

- A. `true`
- B. `false`
- C. `NaN`
- D. Throws error

**Correct answer: A**

**Explanation:** With `==`, `[ ]` is coerced to `""`, then to `0`; `false` is also coerced to `0`, so comparison is `true`. It's a classic weirdness.

---

### 35. What is the value of `typeof NaN`?

- A. `"nan"`
- B. `"number"`
- C. `"undefined"`
- D. `"object"`

**Correct answer: B**

**Explanation:** `NaN` is a special numeric value, so its type is `"number"`.

---

### 36. How do you check if a value is `NaN` (and only `NaN`) in modern JavaScript?

- A. `value == NaN`
- B. `value === NaN`
- C. `isNaN(value)`
- D. `Number.isNaN(value)`

**Correct answer: D**

**Explanation:** `Number.isNaN()` checks specifically for `NaN` without coercion; `isNaN()` coerces and can give surprising results.

---

### 37. What is the result?

```
console.log([] + []);
```

- A. `[]`
- B. `" "`
- C. `"[]"`
- D. `NaN`

**Correct answer: B**

**Explanation:** Arrays are converted to strings when using `+`. `[]`.`toString()` is `" "`, so empty string + empty string is `" "`.

---

### 38. What does `Array.prototype.map()` return?

- A. A new array
- B. A modified original array

- C. A number
- D. An object with keys and values

**Correct answer: A**

**Explanation:** `map()` creates a new array containing the results of applying a callback to each element, without mutating the original.

---

**39. Which method is best for filtering elements from an array based on a condition?**

- A. `forEach()`
- B. `map()`
- C. `filter()`
- D. `reduce()`

**Correct answer: C**

**Explanation:** `filter()` returns a new array containing only the elements for which the callback returns `true`.

---

**40. What does `Array.prototype.forEach()` return?**

- A. A new array
- B. The original array
- C. `undefined`
- D. The number of iterations

**Correct answer: C**

**Explanation:** `forEach()` is purely for side effects; it always returns `undefined`.

---

**41. What does `Array.prototype.reduce()` typically do?**

- A. Sorts an array
- B. Flattens nested arrays only
- C. Reduces an array to a single value
- D. Filters elements

**Correct answer: C**

**Explanation:** `reduce()` accumulates results by applying a callback, producing a single output value (sum, object, etc.).

---

## 42. Which operator spreads the elements of an iterable?

- A. `...` (spread operator)
- B. `*`
- C. `&`
- D. `=>`

**Correct answer: A**

**Explanation:** The spread syntax `...iterable` expands its elements in array literals, function calls, etc.

---

## 43. What is destructuring in JavaScript?

- A. Removing properties from objects
- B. Assigning properties or elements from objects/arrays into variables
- C. Deleting variables
- D. Breaking a loop

**Correct answer: B**

**Explanation:** Destructuring lets you extract values from arrays or objects into distinct variables using pattern syntax.

---

## 44. Which is valid array destructuring?

- A. `let {a, b} = [1, 2];`
- B. `let [a, b] = [1, 2];`
- C. `let (a, b) = [1, 2];`
- D. `let [a: 1, b: 2];`

**Correct answer: B**

**Explanation:** Array destructuring uses square brackets, so `[a, b]` matches elements of the array.

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## 45. Which is valid object destructuring?

- A. `let [name] = { name: "Max" };`
- B. `let {name} = { name: "Max" };`
- C. `let (name) = { name: "Max" };`
- D. `let {name: "Max"};`

**Correct answer: B**

**Explanation:** Object destructuring uses curly braces with property names: `{name} = obj`.

---

**46. What is the default value of `this` inside a regular function (non-strict mode) called as `fn()` in the browser?**

- A. `undefined`
- B. The global object (`window`)
- C. The function object itself
- D. `null`

**Correct answer: B**

**Explanation:** In non-strict mode, a plain function call binds `this` to the global object (`window` in browsers).

---

**47. In an arrow function, `this` is:**

- A. Dynamically bound
- B. Always `window`
- C. Lexically inherited from the surrounding scope
- D. Always `undefined`

**Correct answer: C**

**Explanation:** Arrow functions don't have their own `this`; they capture `this` from the enclosing lexical scope.

---

**48. How do you create a new object using a constructor function?**

- A. `Person()`
- B. `new Person()`
- C. `create Person()`
- D. `Object(Person)`

**Correct answer: B**

**Explanation:** The `new` keyword creates a new object and binds `this` inside the constructor function to that object.

---

**49. Which prototype is used when calling a method on an array literal like `[]`?**

- A. `Object.prototype`
- B. `Array.prototype`

- C. `Function.prototype`
- D. `Prototype.prototype`

**Correct answer: B**

**Explanation:** Arrays inherit methods (like `push`, `map`) from `Array.prototype`, which itself inherits from `Object.prototype`.

---

## 50. What does `Object.create(proto)` do?

- A. Copies all properties from `proto`
- B. Creates an object with its internal prototype set to `proto`
- C. Clones `proto` deeply
- D. Creates a new class

**Correct answer: B**

**Explanation:** `Object.create(proto)` returns a new object whose `[[Prototype]]` is `proto`.

---

## 51. How do you define a class in modern JavaScript?

- A. `class Person {}`
- B. `function class Person {}`
- C. `Person class {}`
- D. `new class Person {}`

**Correct answer: A**

**Explanation:** ES6 introduced the `class` syntax: `class Name { ... }`.

---

## 52. How do you define a method inside a class?

- A. `methodName: function() {}`
- B. `function methodName() {}`
- C. `methodName() {}`
- D. `let methodName() {}`

**Correct answer: C**

**Explanation:** Inside class bodies, methods are defined as `methodName() { ... }` without `function` keyword.

---

**53. How do you create a subclass from a class `Parent`?**

- A. `class Child: Parent {}`
- B. `class Child extends Parent {}`
- C. `class Child inherits Parent {}`
- D. `class Child Parent {}`

**Correct answer: B**

**Explanation:** `extends` is used to define a derived class: `class Child extends Parent`.

---

**54. Which keyword calls the parent class constructor?**

- A. `this()`
- B. `parent()`
- C. `base()`
- D. `super()`

**Correct answer: D**

**Explanation:** `super()` calls the constructor of the parent class in a subclass.

---

**55. What is the output?**

```
console.log(typeof function() {});
```

- A. `"object"`
- B. `"function"`
- C. `"callable"`
- D. `"method"`

**Correct answer: B**

**Explanation:** Regular functions have the type `"function"` when using `typeof`.

---

**56. Which statement about promises is true?**

- A. A promise can be pending, fulfilled, or rejected
- B. A promise can only be fulfilled
- C. Promises block the main thread
- D. Promises replace all callbacks



**Correct answer: A**

**Explanation:** Promises have three main states: `pending`, `fulfilled`, and `rejected`. They're a pattern for handling async operations.

---

**57. What does `Promise.resolve(5)` create?**

- A. A rejected promise with value 5
- B. A fulfilled promise with value 5
- C. A pending promise with value 5
- D. A synchronous return value 5

**Correct answer: B**

**Explanation:** `Promise.resolve(5)` returns a promise that is immediately fulfilled with the value 5.

---

**58. How do you attach a success handler to a promise `p`?**

- A. `p.then(onFulfilled)`
- B. `p.success(onFulfilled)`
- C. `p.done(onFulfilled)`
- D. `p.resolve(onFulfilled)`

**Correct answer: A**

**Explanation:** `then()` registers callbacks for fulfilled and/or rejected states.

---

**59. How do you handle errors in a promise chain?**

- A. With `try/catch` only
- B. With `.catch()`
- C. With `.error()`
- D. With `.fail()`

**Correct answer: B**

**Explanation:** `.catch()` handles rejected promises and errors thrown in previous `.then()` handlers.

---

**60. Which keyword is used to make a function asynchronous?**

- A. `sync`
- B. `await`

- C. `async`
- D. `defer`

**Correct answer: C**

**Explanation:** Prefixing a function with `async` makes it return a promise and allows `await` inside it.

---

### 61. What does `await` do in an `async` function?

- A. Pauses the whole program
- B. Pauses only that async function until the promise settles
- C. Converts a promise to a callback
- D. Makes a function synchronous

**Correct answer: B**

**Explanation:** `await` suspends the async function execution until the promise resolves or rejects, without blocking the main thread.

---

### 62. What happens if an error is thrown inside an `async` function?

- A. It crashes the browser
- B. It becomes a rejected promise
- C. It is ignored
- D. It becomes a fulfilled promise

**Correct answer: B**

**Explanation:** Errors thrown inside `async` functions reject the returned promise, which can be caught with `.catch()` or `try/catch` around `await`.

---

### 63. What does `setTimeout(fn, 0)` do?

- A. Executes `fn` immediately
- B. Schedules `fn` after the current call stack clears
- C. Blocks execution until `fn` completes
- D. Throws an error

**Correct answer: B**

**Explanation:** `setTimeout(fn, 0)` queues `fn` to run after the current call stack and microtasks, not truly instantly.

---

**64. Which of these is not part of the JavaScript language itself but provided by the browser?**

- A. Array
- B. Promise
- C. document
- D. Object

**Correct answer: C**

**Explanation:** `document` is part of the DOM API provided by the browser, not the core language.

---

**65. How do you select an element with id "main" in the DOM?**

- A. `document.getElement("main")`
- B. `document.getElementById("main")`
- C. `document.query("#main")`
- D. `document.id("main")`

**Correct answer: B**

**Explanation:** `getElementById()` selects an element whose `id` matches the given string.

---

**66. Which method selects the first element matching a CSS selector?**

- A. `document.querySelector()`
- B. `document.querySelectorAll()[0]` only
- C. `document.getElementBySelector()`
- D. `document.selectFirst()`

**Correct answer: A**

**Explanation:** `querySelector()` returns the first matching element or `null`.

---

**67. How do you add a click event listener to a button element `btn`?**

- A. `btn.on("click", fn)`
- B. `btn.click(fn)`
- C. `btn.addEventListener("click", fn)`
- D. `btn.addClick(fn)`

**Correct answer: C**

**Explanation:** `addEventListener()` is the standard way to listen to events on DOM elements.

---

**68. What will `document.querySelectorAll(".item")` return?**

- A. A single element
- B. An array
- C. A NodeList
- D. A string

**Correct answer: C**

**Explanation:** `querySelectorAll()` returns a `NodeList` (array-like collection) of all matching elements.

---

**69. Which property changes the text inside an element?**

- A. `innerText`
- B. `text`
- C. `content`
- D. `valueText`

**Correct answer: A**

**Explanation:** `innerText` (or `textContent`) changes the textual content of an element.

---

**70. How do you prevent a form's default submit behavior?**

- A. `event.stop()`
- B. `event.preventDefault()`
- C. `event.cancel()`
- D. `event.stopPropagation()`

**Correct answer: B**

**Explanation:** `preventDefault()` stops the default action (like form submission or link navigation).

---

**71. What does `event.stopPropagation()` do?**

- A. Prevents default browser behavior
- B. Stops the event from bubbling up to parent elements

- C. Disables all event listeners
- D. Cancels form submission

**Correct answer: B**

**Explanation:** `stopPropagation()` prevents the event from moving to ancestor elements in the DOM event flow.

---

## 72. What is hoisting?

- A. Moving files to the top of a project
- B. JavaScript's behavior of moving declarations to the top of their scope
- C. Sorting variables alphabetically
- D. Loading external scripts

**Correct answer: B**

**Explanation:** Declarations (with `var`, function declarations) are hoisted to the top of their scope before execution.

---

## 73. Which are hoisted with their definitions?

- A. Function declarations
- B. Function expressions
- C. Arrow functions assigned to variables
- D. Both B and C

**Correct answer: A**

**Explanation:** Function declarations are hoisted with their full definitions. Function expressions and arrow functions are hoisted only as variables.

---

## 74. What is the output?

```
console.log(hoisted());  
function hoisted() {  
  return "Hello";  
}
```

- A. "Hello"
- B. `undefined`
- C. Error
- D. `null`

**Correct answer: A**

**Explanation:** The function declaration `hoisted` is hoisted entirely, so it can be called before it appears in the code.

---

### 75. What is the output?

```
console.log(x);  
let x = 5;
```

- A. 5
- B. `undefined`
- C. `null`
- D. `ReferenceError`

**Correct answer: D**

**Explanation:** `let` variables cannot be accessed before declaration due to the temporal dead zone.

---

### 76. Which method checks if an array includes a certain value?

- A. `arr.contains(value)`
- B. `arr.has(value)`
- C. `arr.includes(value)`
- D. `arr.exists(value)`

**Correct answer: C**

**Explanation:** `includes()` returns `true` if the array contains the value.

---

### 77. Which statement about `const` is true?

- A. `const` variables cannot be reassigned or mutated
- B. `const` prevents reassigning the variable binding but objects can still be mutated
- C. `const` makes values deeply immutable
- D. `const` is function-scoped

**Correct answer: B**

**Explanation:** `const` prevents rebinding the variable, but if it references an object/array, its internal properties can still change.

---

### 78. What is the output?

```
const obj = { a: 1 };  
obj.a = 2;  
console.log(obj.a);
```

- A. 1
- B. 2
- C. Error
- D. undefined

**Correct answer: B**

**Explanation:** The reference `obj` is constant, but its contents are mutable, so `a` can change from 1 to 2.

---

### 79. What is a template literal?

- A. A precompiled string
- B. A string defined with backticks that can include expressions with `${}`
- C. A JSON template
- D. A string used only for HTML

**Correct answer: B**

**Explanation:** Template literals use backticks ( ``` ) and allow interpolation with `${expression}` and multi-line strings.

---

### 80. Which is a valid template literal?

- A. `"Hello ${name}"`
- B. `'Hello ${name}'`
- C. ``Hello ${name}``
- D. `Hello ${name}`

**Correct answer: C**

**Explanation:** Interpolation with `${}` only works inside backtick-delimited template literals.

---

### 81. How do you export a named function in ES modules?

- A. `module.export function myFunc() {}`
- B. `export function myFunc() {}`

- C. `exports.myFunc = function(){} in browser modules`
- D. `export: myFunc()`

**Correct answer: B**

**Explanation:** ES module syntax uses `export` before declarations, e.g., `export function myFunc() {}`.

---

## 82. How do you import a named function `myFunc` from `./utils.js`?

- A. `import { myFunc } from "./utils.js";`
- B. `require("./utils.js").myFunc;` in browser modules
- C. `import myFunc from "./utils.js";` only
- D. `include myFunc from "./utils.js";`

**Correct answer: A**

**Explanation:** Named imports use curly braces: `import { myFunc } from "./utils.js";`.

---

## 83. What is the default export import syntax?

- A. `import { default } from "./mod.js";`
- B. `import * as default from "./mod.js";`
- C. `import something from "./mod.js";`
- D. `import default("./mod.js");`

**Correct answer: C**

**Explanation:** `import something from "./mod.js";` imports the module's default export as `something`.

---

## 84. Which tool is used at runtime to determine if a property exists directly on an object (not in its prototype chain)?

- A. `in` operator
- B. `obj.hasOwnProperty("prop")`
- C. `obj.propertyExists("prop")`
- D. `Object.exists(obj, "prop")`

**Correct answer: B**

**Explanation:** `hasOwnProperty` checks only own (non-inherited) properties; `in` checks the entire prototype chain.



---

**85. What is the result?**

```
const a = { x: 1 };  
const b = a;  
b.x = 2;  
console.log(a.x);
```

- A. 1
- B. 2
- C. undefined
- D. Error

**Correct answer: B**

**Explanation:** `a` and `b` reference the same object, so changing `b.x` also changes `a.x`.

---

**86. How do you make a shallow copy of an object `obj`?**

- A. `const copy = obj;`
- B. `const copy = Object.copy(obj);`
- C. `const copy = { ...obj };`
- D. `const copy = new obj();`

**Correct answer: C**

**Explanation:** The spread operator `{ ...obj }` creates a shallow copy of the object's own enumerable properties.

---

**87. What is event delegation?**

- A. Assigning one event to multiple elements at once
- B. Attaching a single event listener to a parent element to handle events from its children
- C. Delegating events from browser to server
- D. Combining multiple events into one

**Correct answer: B**

**Explanation:** Event delegation uses event bubbling so one listener on a parent can handle events from many child elements efficiently.

---

**88. Which built-in data structure maintains insertion order and uses key-value pairs with any type of key?**

- A. Object
- B. Map
- C. Set
- D. Array

**Correct answer: B**

**Explanation:** Map allows keys of any type and preserves insertion order; Object keys are strings/symbols.

---

**89. Which structure holds unique values only (no duplicates)?**

- A. Array
- B. Map
- C. Set
- D. Object

**Correct answer: C**

**Explanation:** Set stores unique values; adding the same value again has no effect.

---

**90. What does "use strict" mainly help with?**

- A. Faster network requests
- B. Cleaner syntax highlighting
- C. Catching common mistakes and unsafe actions
- D. Making code run in parallel

**Correct answer: C**

**Explanation:** Strict mode throws errors for unsafe actions (like implicit globals) and disallows some problematic features.

---

**91. What does Symbol() create?**

- A. A unique, immutable value usable as an object key
- B. A string alias
- C. A new data type like number
- D. A private variable

**Correct answer: A**

**Explanation:** Symbols are unique, immutable primitive values often used as object property keys.

---

## 92. What is the difference between `==` and `===`?

- A. `===` compares only types
- B. `==` compares only values
- C. `===` compares value and type without coercion
- D. They are identical

**Correct answer: C**

**Explanation:** `===` is strict equality (no coercion); `==` allows type coercion.

---

## 93. What does `Object.freeze(obj)` do?

- A. Prevents adding, removing, or changing properties
- B. Prevents only adding new properties
- C. Prevents only deleting properties
- D. Makes deep immutable copies

**Correct answer: A**

**Explanation:** A frozen object's existing properties cannot be changed, added, or deleted (shallow freeze).

---

## 94. What is the output?

```
console.log(typeof [].constructor);
```

- A. `"array"`
- B. `"object"`
- C. `"function"`
- D. `"constructor"`

**Correct answer: C**

**Explanation:**  `[].constructor` is `Array`, which is a function, so `typeof` is `"function"`.

---

## 95. What does `Object.keys(obj)` return?

- A. All values of `obj`
- B. An array of `obj`'s own enumerable property names
- C. Prototype chain keys
- D. A Map of key/value entries

**Correct answer: B**

**Explanation:** `Object.keys()` returns an array with the object's own enumerable property names.

---

**96. What is the main difference between `for...in` and `for...of`?**

- A. `for...in` iterates values; `for...of` keys
- B. `for...in` iterates keys; `for...of` values of iterables
- C. They are the same
- D. `for...of` only works on objects

**Correct answer: B**

**Explanation:** `for...in` loops over enumerable property names (keys), while `for...of` iterates over iterable values (arrays, strings, etc.).

---

**97. What will this log?**

```
console.log("2" * "3");
```

- A. "23"
- B. 6
- C. NaN
- D. "6"

**Correct answer: B**

**Explanation:** The `*` operator coerces both strings to numbers, so `"2"` and `"3"` become `2` and `3`, resulting in `6`.

---

**98. What is the output?**

```
console.log(Boolean("false"));
```

- A. `true`
- B. `false`
- C. NaN
- D. Error

**Correct answer: A**

**Explanation:** Non-empty strings are truthy, so `"false"` converts to `true` as a boolean.

---

### 99. What is function currying?

- A. Combining two functions into one
- B. Transforming a function with multiple arguments into a series of functions each taking one argument
- C. Removing parameters from a function
- D. Overriding built-in functions

**Correct answer: B**

**Explanation:** Currying breaks down a multi-argument function into nested unary functions, enabling partial application.

---

### 100. What is the main purpose of JavaScript in web development?

- A. Styling web pages
- B. Structuring content
- C. Adding interactivity and dynamic behavior
- D. Serving web pages from the server

**Correct answer: C**

**Explanation:** HTML structures content, CSS styles it, and JavaScript adds logic, interactivity, and dynamic updates on the client side.