### 1. Syntax and Basic Concepts:

- Variables (var, let, const)
- Data Types (Number, String, Boolean, Object, Null, Undefined)
- Operators (Arithmetic, Comparison, Logical, Assignment, Ternary)
- Comments

#### 2. Control Flow and Iteration:

- Conditional Statements (if, else, else if, switch)
- Loops (for, while, do...while, for...in, for...of)
- Control Statements (break, continue, return)

### 3. Functions:

- Function Declaration vs. Function Expression
- Arrow Functions
- Parameters and Arguments
- Return Statement
- Function Scope vs. Block Scope
- Closures

## 4. Arrays:

- Declaration and Initialization
- Accessing Array Elements
- Array Methods (forEach, map, filter, reduce, etc.)
- Adding and Removing Elements

## 5. Objects:

- Object Literal
- Object Properties and Methods
- Object Constructors
- Prototypes and Inheritance

## 6. Error Handling:

- try, catch, finally
- Throwing Custom Errors

## 7. Asynchronous JavaScript:

- Callback Functions
- Promises (Creating, Consuming, Chaining)
- async and await

#### 8. ES6+ Features:

- Arrow Functions
- Template Literals
- Destructuring
- Default Parameters
- Rest and Spread Operators
- Classes and Inheritance
- Modules

## 9. Scope and Closures:

- Global Scope
- Local Scope
- Lexical Scope
- Closure Examples

## 10. Event Handling:

- Event Listeners
- Event Objects
- Event Bubbling and Capturing

## 11. Type Conversion and Coercion:

- Explicit vs. Implicit Conversion
- Truthy and Falsy Values

## 12. Regular Expressions:

- Creating Regular Expressions
- Regular Expression Methods

#### 13. Strict Mode:

• Enabling Strict Mode

### 14. Debugging:

- Using console.log()
- Chrome DevTools

### 15. Memory Management:

Garbage Collection

### 16. Functional Programming Concepts:

- Higher-order Functions
- Pure Functions
- Immutability

# 17. Best Practices and Coding Conventions:

- Naming Conventions
- Code Formatting
- Code Readability

## 18. ECMAScript Standard:

• Understanding the ECMAScript specification

### 19. Practice:

• Solve coding challenges and exercises

#### 20. Documentation:

• Familiarize yourself with MDN Web Docs for JavaScript

Mastering these core JavaScript concepts will provide you with a strong foundation to build upon and tackle more advanced topics or frameworks.