

JavaScript Learning Plan

- Week 1 : Core Basics

Goal: Understand JavaScript fundamentals

Day 1

- Introduction to JavaScript
- How to run JS (browser console, VS Code)
- Variables: `var`, `let`, `const`
- Data types: string, number, boolean, null, undefined

Day 2

- Operators: arithmetic, assignment, comparison, logical
- String concatenation & template literals
- **Practice:** Create a script that prints your name, age, and a fun fact.

Day 3

- Conditionals: `if`, `else if`, `else`, `switch`
- **Practice:** Number guessing (static number)

Day 4

- Loops: `for`, `while`, `do...while`
- **Practice:** Print numbers 1-10, sum them

Day 5

- Functions (normal + arrow)
- Parameters & return values
- **Practice:** Function that takes 2 numbers and returns their sum

Day 6

- Arrays: indexing, `push`, `pop`, `shift`, `unshift`
- Looping arrays: `for`, `for...of`
- **Practice:** Store 5 favorite movies & print them

Day 7

- Objects: key-value pairs, accessing/updating values
- **Practice:** Create an object for a student with name, age, grade

- Week 2 : DOM & Events

Goal: Make your JavaScript interact with HTML

Day 8

- `document.querySelector` & `getElementById`
- Changing text, HTML, and CSS styles

Day 9

- Creating & removing HTML elements with JS
- **Practice:** Create a button that adds a new `<p>` element

Day 10

- Event listeners: `click`, `mouseover`, `keydown`
- **Practice:** Button click changes background color

Day 11

- Forms & inputs (`value`, `validation`)
- **Practice:** Simple form that prints input value on submit

Day 12

- Image manipulation with JS
- **Practice:** Button that changes image source

Day 13

- `innerHTML` vs `textContent`, `classList`, `toggle`
- **Practice:** Toggle dark mode button

Day 14

- **Mini Project:** Counter App (increment, decrement, reset)

- Week 3 : Modern JavaScript (ES6+)

Goal: Learn the features used in most modern code

Day 15

- `let` vs `const`, block scope
- Template literals & string methods

Day 16

- Destructuring (arrays & objects)
- Spread & rest operators

Day 17

- Array methods: `map`, `filter`, `reduce`
- **Practice:** Filter numbers > 50 from an array

Day 18

- Default parameters & arrow functions

Day 19

- Object shorthand, computed property names

Day 20

- Modules: `export` / `import` (basic idea)

Day 21

- **Mini Project:** To-Do List

- Week 4 : Async JS & APIs

Goal: Work with data from the internet

Day 22

- `setTimeout` & `setInterval`

Day 23

- Promises (resolve, reject, `.then`)

Day 24

- Fetch API basics
- **Practice:** Fetch data from `https://jsonplaceholder.typicode.com/posts`

Day 25

- `async` & `await` syntax

Day 26

- JSON basics (`JSON.parse` , `JSON.stringify`)

Day 27

- **Mini Project:** Weather App using API

Day 28

- LocalStorage (save/load data in browser)

Day 29

- **Final Project:** Quiz Game (with score tracking)

Day 30

- **Revision & Challenge Day:** Try to build a Calculator App from scratch without looking at

Tips to Succeed

- Code **daily**, even if just 20 minutes
- Don't skip the projects – they make things stick
- Use **MDN Web Docs** for deep understanding
- Start small, then improve your projects over time