Title: JavaScript Basics

What Is JavaScript
JavaScript is the programming language of the web. It lets you make web pages interactive —
like showing messages, updating content, or handling button clicks — without reloading the
page.
It runs directly in the browser and works together with HTML (structure) and CSS (style).

Variables and Data Types
Variables are containers for storing data values.
You can create them using let, const, or var.
Example: let name = "Sherif"; const age = 25; var city = "Cairo";
Common data types include:

String ▯ "Hello"

Number ▯ 42

Boolean ▯ true or false

Array ▯ [1, 2, 3]

Object ▯ { name: "Ali", age: 25 }

Operators
Operators help you perform actions on values.
Examples:

Arithmetic: +, -, *, /

Comparison: ==, ===, !=, >

Logical: &&, ||, !

Conditional Statements
Use conditionals to make decisions in your code.
Example:
if (age > 18) { You can vote } else { You are too young }

Loops
Loops repeat code automatically.
Example: for (let i = 0; i < 5; i++) { console.log(i) }
You can also use while or for...of loops.

Functions
Functions let you group and reuse code.
Example: function greet(name) { return "Hello, " + name }
greet("Sherif") ▯ "Hello, Sherif"

DOM Interaction
JavaScript can change HTML content dynamically.
Example: document.getElementById("title").innerText = "Welcome to JavaScript!"