

DWA_02.8 Knowledge Check_DWA2

1. What do ES5, ES6 and ES2015 mean - and what are the differences between them?

The designations ES5, ES6, and ES2015 denote distinct iterations of the ECMAScript standard, a specification that establishes the scripting language used by JavaScript.

JavaScript saw substantial improvements with ES5. Strict mode, which imposes more stringent guidelines for developing JavaScript code, new array manipulation techniques, JSON compatibility, and enhanced error handling with try-catch statements are some of the noteworthy new features included in ES5. The majority of contemporary web browsers support ES5.

ES6 is the next major update to the ECMAScript standard and was released in 2015. ES6 introduced many new features and syntax enhancements to JavaScript, making it a more powerful and expressive language. Some notable features introduced in ES6 include block-scoped variables with "let" and "const", arrow functions, template literals, classes, modules, and enhanced object literals.

ES6 is essentially known by another name, ES2015. "ES2015" refers to the year that the standard was officially adopted. ES2015 and ES6 are equivalent because the ECMAScript group chose to adopt a new naming scheme based on the year of release after ES6.

2. What are JScript, ActionScript and ECMAScript - and how do they relate to JavaScript?

JScript and ActionScript are ECMAScript derivatives, each having unique capabilities and applications.

JScript:

- JScript is a scripting language developed by Microsoft.
- It is based on the ECMAScript standard.
- JScript is designed to be compatible with JavaScript.

- JScript was commonly used in Internet Explorer.

Action Script:

- ActionScript is a programming language for creating Adobe Flash applications and interactive multimedia.
- It was used by developers to produce interactive components, animations, and buttons.
- Similar to JavaScript, it was based on ECMAScript.

ECMAScript

- ECMAScript is a set of rules that define how JavaScript works.
- ECMAScript is a standardized scripting language specification.
- It forms the basis of JavaScript and other programming languages.
- ECMAScript is used to build interactive web applications, server-side applications, mobile apps, and more.

3. What is an example of a JavaScript specification - and where can you find it?

The specifications comprise a set of documents outlining the expected behaviour of JavaScript and its variations inside the framework of JavaScript and its variations.

You may discover comprehensive details on the ECMAScript 2021 language in this specification. Syntax, data types, control flow, functions, objects, modules, error handling, and other subjects are covered.

You can access the ECMAScript specification by visiting the following link:

<https://www.ecma-international.org/publications-and-standards/standards/ecma-262/>

4. What are v8, SpiderMonkey, Chakra and Tamarin? Do they run JavaScript differently?

The way that various JavaScript compiler engines execute JavaScript varies depending on the implementation specifics, optimisation strategies, and performance attributes.

5. Show a practical example using caniuse.com and the MDN compatibility table.
