

DWA_02.8 Knowledge Check_DWA2

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

ES5 (ECMAScript 5): ES5, released in 2009, was a significant update to JavaScript. It introduced features like strict mode, which enforces a stricter set of rules for writing JavaScript code to avoid common mistakes. It also added new Array methods (e.g., `forEach`, `map`, `filter`, etc.) and other enhancements to make coding easier and more efficient. ES5 is widely supported by all modern web browsers and is still used extensively in web development.

ES6 (ECMAScript 2015): ES6, also known as ECMAScript 2015, was released in 2015. It was a major update that brought many new features and syntax improvements to JavaScript. Some of the notable additions include the `let` and `const` keywords for variable declarations, arrow functions for shorter function syntax, classes for object-oriented programming, and the `for...of` loop for iterating over iterable objects. ES6 also introduced template literals, destructuring assignments, and enhanced object literals. While ES6 added many powerful features, not all web browsers supported it immediately.

ES2015 (ECMAScript 2015): ES2015 is simply an alternative name for ES6, indicating that it was finalized in 2015. The term "ES6" was commonly used during the development phase of the standard, but once it was officially published, it was referred to as "ES2015" to reflect the year of its release. So, ES6 and ES2015 are the same and refer to the ECMAScript version released in 2015.

In summary, ES5, ES6 (or ES2015), and subsequent versions of ECMAScript are updates to the JavaScript language, each bringing new features and improvements.

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

ECMAScript is the standard specification that defines the rules and features for scripting languages like JavaScript, JScript, and ActionScript. JavaScript is the most popular and widely used implementation of ECMAScript, while JScript is Microsoft's version, and ActionScript is used with Adobe Flash. They all share a common

foundation in ECMAScript but may have differences based on their specific implementations and intended use cases.

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

Single-line comments should always start with `//"`

The ECMAScript Language Specification describes how the language should behave, what syntax is allowed, and what functionalities are supported.

You can find it in lines of code.

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

V8, SpiderMonkey, Chakra, and Tamarin are JavaScript engines used in different web browsers and environments. They are responsible for running JavaScript code by converting it into machine code. Each engine may have its own optimizations and performance characteristics, leading to variations in JavaScript execution speed and behavior across different platforms. However, the core functionality of interpreting and executing JavaScript code remains the same in all these engines.

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