

DWA_02.8 Knowledge Check_DWA2

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

- ES5 is a shortcut for ECMAScript 5, which was the first major revision for JavaScript.
- ES6 is the newer JavaScript version that was introduced in 2015.
- ES2015 is the latest version of JavaScript programming language.

The difference between them is that each version introduced a newer feature, new enhancements, and new improvements to the language however ES6 and ES2015 are the same, the naming convention “ES2015” was introduced to reflect the year of its release, but it refers to the same version as ES6.

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

- JScript is a popular object-based scripting language from Microsoft based on the ECMA standard. It is an interpreted language that is executed without a preliminary compilation.
- ActionScript is an object-oriented programming language originally developed by Macromedia Inc. It is influenced by HyperTalk, the scripting language HyperCard. It is now an implementation of ECMAScript, though it originally arose as a sibling, both being influenced by HyperTalk.
- ECMAScript is a JavaScript standard intended to ensure the interoperability of webpages across different web browsers.

JavaScript is the most widely known and used implementation of the ECMAScript specification, primarily used for web development. ActionScript, while based on the same specification, was used specifically for developing interactive content within

Adobe Flash. ECMAScript serves as the standard specification that defines the language features and behavior shared by both JavaScript and ActionScript.

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

- An example of a JavaScript specification is the ECMAScript 2021 (ES2021) specification. It can be found on the official ECMAScript website <https://www.ecma-international.org/standards/ecma-262/> and also on MDN <https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference> and lastly on the GitHub which hosts ECMAScript specification on a repository at: <https://github.com/tc39/ecma262>.
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4. What are v8, SpiderMonkey, Chakra, and Tamarin? Do they run JavaScript differently?

- v8 is a free and open-source JavaScript and WebAssembly engine developed by the Chromium Project for Chromium and Google Chrome.
- SpiderMonkey is an open-source JavaScript and WebAssembly engine by the Mozilla Foundation.
- Chakra is a proprietary JScript engine that is developed by Microsoft. It is used in the Internet Explorer web browser.
- Tamarin is a discontinued free software virtual machine with just-in-time (JIT) compilation support intended to implement the 4th edition of the ECMAScript (ES4) language standard.

Yes, they run JavaScript differently in the sense that they use different techniques to enhance and optimize JavaScript performance. They also differ in terms of performance characteristics, optimization strategies, memory management, and support for specific language features.

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

- <https://caniuse.com/?search=css%20grid%20layout>

CSS Grid Layout (level 1)

CR

Method of using a grid concept to lay out content, providing a mechanism for authors to divide available space for layout into columns and rows using a set of predictable sizing behaviors. Includes support for all `grid-*` properties and the `fr` unit.

Usage % of all users ?

Global 96.49% + 0.4% = 96.88%

unprefixed: 96.49%

Current aligned Usage relative Date relative Filtered All

Chrome	Chrome 57	Chrome for Android	Safari on iOS*
4-28	Support info		
29-56	✓ Supported		
57	Notes		
58-112	There are some bugs with overflow (1356820 , 1348857 , 1350925)		3.2-10.2
113			10.3-16.4
114-116		113	16.5

Test on Chrome 57

