

# DWA\_02.8 Knowledge Check\_DWA2

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

ES5, ES6, and ES2015 are all names for the same version of the ECMAScript standard, which is the specification for the JavaScript programming language. ES5 was released in 2009, ES6 was released in 2015, and ES2015 is just another name for ES6. The main difference between ES5 and ES6 is that ES6 introduces a number of new features, such as: Classes, Modules, Arrow functions, Spread and rest parameters, Template literals and Async functions.

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

- a) JScript is a proprietary scripting language developed by Microsoft. It is based on ECMAScript, the standard scripting language for the web. JScript is the default scripting language in Microsoft's web browsers, such as Internet Explorer and Edge.
- b) ActionScript is an object-oriented scripting language developed by Adobe. It is based on ECMAScript and is used to create interactive content for Adobe Flash.
- c) ECMAScript is an international standard for a general-purpose scripting language. It is the basis for many popular scripting languages, including JavaScript, JScript, and ActionScript.

JavaScript is a cross-platform, open-source scripting language that is also based on ECMAScript. Although it is the most popular scripting language on the web.

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

The latest version of the specification is ECMAScript® 2022 Language Specification. It can be found on the Ecma International website at <https://tc39.es/ecma262/>.

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

- a) V8 is a JavaScript engine developed by Google. It is used in Chrome, Opera, and Node.js. V8 is known for its high performance and its ability to optimize JavaScript code.
- b) SpiderMonkey is a JavaScript engine developed by Mozilla. It is used in Firefox and Thunderbird. SpiderMonkey is known for its stability and its support for new JavaScript features.
- c) Chakra is a JavaScript engine developed by Microsoft. It is used in Edge and Internet Explorer. Chakra is known for its compatibility with older versions of JavaScript.
- d) Tamarin is a JavaScript engine developed by Adobe. It is used in Flash Player. Tamarin is known for its ability to run JavaScript code in a secure environment.

Yes, v8, SpiderMonkey, Chakra, and Tamarin run JavaScript differently. Each engine has its own strengths and weaknesses. For example, V8 is known for its high performance, while SpiderMonkey is known for its stability. The best JavaScript engine for you will depend on your needs. If you need a high-performance engine for web development, V8 is a good choice. If you need a stable engine for server-side development, SpiderMonkey is a good choice.

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5. Show a practical example using [caniuse.com](https://caniuse.com) and the MDN compatibility table.

Let's say you want to use the new `const` keyword in JavaScript. You can go to [caniuse.com](https://caniuse.com) and search for `const`. You will see that `const` is supported in all major browsers, including Chrome, Firefox, Edge, and Safari.

You can also go to the MDN compatibility table for `const`. The MDN compatibility table shows you the support for `const` in different versions of different browsers. For example, you can see that `const` was first supported in Chrome 4, Firefox 10, Edge 12, and Safari 8.

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