

# 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** stands for ECMAScript 5. It is the fifth edition of the ECMAScript standard, which is a specification that defines the scripting language used by web browsers called JavaScript. ECMAScript is the official name for the standard, while JavaScript is the most commonly used implementation of that standard.

**ES6** stands for ECMAScript 6, which is the sixth edition of the ECMAScript standard. ECMAScript is a specification that defines the scripting language used by web browsers, commonly known as JavaScript.

**ES2015** is another name for ES6

It represents a significant update to the language. It is often referred to as ES6 or ES2015 interchangeably. It also refers to the version of the ECMAScript standard released in June 2015. ECMAScript is the specification that defines the scripting language used by web browsers, commonly known as JavaScript.

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

**JScript** is Microsoft's version of JavaScript used in Internet Explorer.

**ActionScript** is a scripting language used in Adobe Flash.

**ECMAScript** is the official standard for JavaScript.

ECMAScript is like the blueprint for JavaScript, while JScript and ActionScript are specific implementations of that blueprint. JavaScript is the most widely used implementation of ECMAScript and is supported by all modern browsers. So, while they have some differences, they are all connected to the same core language.

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

An example of a JavaScript specification is the ECMAScript specification. It is a technical document that outlines the rules, syntax, and behavior of the JavaScript language. The specification defines the standard for JavaScript and its different versions, such as ECMAScript 5 (ES5), ECMAScript 6 (ES6), ECMAScript 2015 (ES2015), and so on.

The ECMAScript specification is maintained by Ecma International, a standards organization that oversees the development and standardization of various technologies. The latest version of the ECMAScript specification at the time of my knowledge cutoff in September 2021 is ECMAScript 2022. However, it's important to note that newer versions may have been released since then.

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

**V8** is developed by Google and is used in the Chrome browser. It uses a technique called just-in-time compilation to convert JavaScript code into machine code that can be executed directly by the computer's processor. This makes V8 very fast and efficient.


**SpiderMonkey** is the JavaScript engine used in the Firefox browser. It also utilizes just-in-time compilation, but its implementation and optimization strategies may differ from V8.


**Chakra** was the JavaScript engine used in Microsoft's Edge browser, although it has been replaced by a new engine called "EdgeHTML" in the latest versions of Edge. Chakra also used just-in-time compilation and had its own unique optimizations.

**Tamarin** is a JavaScript engine developed by Adobe for their Flash Player. It used a technique called just-in-time compilation as well, but it also had a special feature called "tracing" that aimed to improve performance.


While all of these engines run JavaScript, they may have different optimizations, performance characteristics, and implementation details, resulting in varying speeds and features.


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

fetch API 

Usage % of **all users**  ?


Global 95.91%

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Chrome	Edge *	Safari	Firefox	Opera	IE  *	Chrome for Android	Safari on iOS *	Samsung Internet	Opera Mini *	Opera Mobile *	UC Browser for Android	Android Browser *	Firefox for Android	QQ Browser	Baidu Browser	KaiOS Browser
4-41	12-13	3.1-10	2-38	10-28			3.2-10.2									
42-112	14-112	10.1-16.4	39-112	29-98	6-10		10.3-16.4	4-20		12-12.1		2.1-4.4.4				2.5
113	113	16.5	113	99	11	113	16.5	21	all	73	13.4	113	113	13.1	13.18	3.1
114-116		16.6-TP	114-115													

Notes Test on a real browser Sub-features Feedback

See full reference on [MDN Web Docs](#).

Support data for this feature provided by:  
 MDN browser-compat-data