

# 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 is the fifth edition of the ECMAScript (a trademarked scripting language specification defined by ECMA International)
- ES6 is the sixth edition of the ECMAScript (a trademarked scripting language specification defined by ECMA International).
- ES2015 (formally ES6) is a fantastic step forward for the JavaScript language. It brings new features and sugaring for patterns that required significant boilerplate in ES5. This includes classes, arrow functions and modules

What are the differences between them?

JavaScript became an ECMAScript standard. ES5 and ES2015 or ES6 are the fifth and sixth versions of the ECMA Script respectively. ES5 stands for ECMAScript 5. It is also called ECMAScript 2009 whereas ES6 stands for ECMAScript 6. It is also called ECMAScript 2015.

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

- JScript is Microsoft's implementation of JavaScript
- ActionScript is an object-oriented programming language originally developed by Macromedia Inc. (later acquired by Adobe). It is influenced by HyperTalk, the scripting language for HyperCard.[2] It is now an implementation of ECMAScript (meaning it is a superset of the syntax and semantics of the language more widely known as JavaScript)

- ECMAScript: A general purpose, cross-platform programming language". After internal negotiations, it was adopted by both Netscape and Microsoft in 1997. Henceforth, what was previously known as JavaScript and JScript were to be unified into a single standardized language titled ECMAScript. At one point, it was even considered to change the file extension from .js to .es. Yet, the name never really caught on, and to this day, we still refer to it as JavaScript.

How do they relate to JavaScript?

ECMAScript is a subset of JavaScript. JavaScript is basically ECMAScript at its core but builds upon it. Languages such as ActionScript, JavaScript, JScript all use ECMAScript as its core.

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

- The specification is a collection of documents describing how JavaScript and its variants should work in the context of JavaScript and its variants
  - The compiler should not execute single-line comments.
  - Single-line comments should always start with "//"
  - Single-line comments accept any character except line breaks.
  - Single-line comments end before the first line breaks

Where can you find it?

**ECMA 262: 1st Edition** (1997)

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

- V8: A JavaScript engine used in Google Chrome and other Chromium-based browsers, Node.js, Deno, and V8.NET.

- SpiderMonkey is open-source JavaScript and WebAssembly engine by the Mozilla Foundation
- Chakra is a free and open-source JavaScript engine developed by Microsoft for its Microsoft Edge Legacy web browser.
- Tamarin is a discontinued free software virtual machine with just-in-time compilation (JIT) support intended to implement the 4th edition of the ECMAScript (ES4) language standard

Do they run JavaScript differently?

Yes. There is a difference in how they run JavaScript.

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

This is an example of a flex box Chrome supports it but some version of internet explorer does not support it

# CSS Flexible Box Layout Module - CR


Method of positioning elements in horizontal or vertical stacks.  
Support includes all properties prefixed with `flex`, as well as `display: flex`, `display: inline-flex`, `align-content`, `align-items`, `align-self`, `justify-content` and `order`.









Current aligned		Usage relative	Date relative	Filtered	All		
Chrome	Edge*	Safari	Firefox	Opera	IE	Chrome for Android	Safari on iOS*
<div><div>Chrome 21 - 28</div><div><div>Support info</div><div>Browser versions</div></div><div><div>✓ Supported with prefix: -webkit-</div><div>Released Jun 26, 2012 - May 21, 2013</div><div>Total usage</div><div>Global: 0.04%</div><div><a href="#">Test on Chrome 21 - 28</a></div></div></div>							
4-20							3.2-6.1
21-28							7-8.4
29-112							9-16.4
113						13	16.5
114-116							

This is to show that some version of internet explorer does not support flex boxes, version 6 to 9 is unable to display. But the versions after that can be able to display it partially.

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Current aligned Usage relative Date relative Filtered All 

Chrome	Edge *	Safari	Firefox	Opera	IE	Chrome for	Safari on *	Samsung	Opera Mini *	Opera Mobile *
				10-11.5						
4-20 		3.1-6 	2-21 	12.1						
21-28 		6.1-8 	22-27 	15-16	6-9					12
29-112	12-112	9-16.4	28-112	17-98	10 					12.1
113	113	16.5	113	99	11 					73
114-116		16.6-TP	114-115							

#### IE 6 - 9

Support info	Browser versions
X Not supported	Released Aug 27, 2001 - Mar 14, 2011
Total usage	
Global: 0.12%	
<a href="#">Test on IE 6 - 9</a> 