

# 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 and ES6 are the fifth and sixth versions of ECMAScript, each with their own respective specification (there's a huge overlap since not much has changed in Javascript since ES5, but there can be different specifications on the same feature for example). ECMAScript is a scripting language specification that defines the features and behaviour of languages like JavaScript.

- ES5(ECMAScript 5) also called ES2009(ECMAScript 2009)
- ES6(ECMAScript 6) also called ES2015(ECMAScript 2015)

ES5, the fifth edition of ECMAScript released in December 2009, introduced several important features and improvements to the JavaScript language such as strict mode, JSON support, native array manipulation methods and more.

ES6 or ES2015, the sixth edition of ECMAScript released in June 2015, represents a major update to the language introducing new features and syntax improvements such as syntax enhancements, block scope variables, modules, classes, built-in methods and more.

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

- **ECMAScript** is a scripting language standard that provides guidelines and specifications for scripting languages. JavaScript, JScript, and ActionScript are all implementations of the ECMAScript standard. It serves as the foundation for languages like JavaScript and JScript. ECMAScript defines the syntax, behaviour, semantics and core features of the languages.
- **JScript** is a Microsoft scripting language that came about from reverse engineering Javascript because JavaScript was an exclusive proprietary scripting language at the time. JScript can be considered a variant of JavaScript tailored for the Microsoft ecosystem. JScript shares many similarities with JavaScript, including its syntax and core features
- **ActionScript** is a well-known Javascript knock-off created by Macromedia. It is an object-oriented language derived from ECMAScript, specifically based on ECMAScript 4 (ES4).

ActionScript provides additional features and capabilities for working with multimedia, animation, and user interactions within the Flash environment.

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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 this extract from the very first specification created by ECMA explaining how single-line commenting should work:

*Because a single-line comment can contain any character except a "LineTerminator" character, and because of the general rule that a token is always as long as possible, a single-line comment always consists of all characters from the "//" marker to the end of the line. However, the "LineTerminator" at the end of the line is not considered to be part of the single-line comment; it is recognized separately by the lexical grammar and becomes part of the stream of input elements for the syntactic grammar. This point is very important because it implies that the presence or absence of single-line comments does not affect the process of automatic semicolon insertion.*

This specification could be found in section 7.8.2 of [ECMA 262: 1st Edition \(1997\)](#).

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

V8, SpiderMonkey, Chakra and Tamarin are some of the most well-known JavaScript compilers. These compilers help make JavaScript code faster and more efficient.

Yes, they run JavaScript differently by either optimising the code while it is running (Just-in-Time compilers) or before it is executed (Ahead-of-Time compilers), which can result in variations in performance and behaviour.

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

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☒ Caniuse (2)      ☒ MDN (1)

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Notes    Test on a real browser    Known issues (0)    Resources (5)    Feedback

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Arrow functions	 45	 12	 22 *	 32	 10	 45	 22 *	 32	 10	 5.0	 45	 1.0	 4.0.0 ...
Trailing comma in parameters	 58	 12	 52	 45	 10	 58	 52	 43	 10	 7.0	 58	 1.0	 8.0.0

✓ Full support    ◆ Partial support    ✕ No support    \* See implementation notes.

🚩 User must explicitly enable this feature. ... Has more compatibility info.

In this article

Try it

### Syntax

Description

### Examples

### Specifications

### Browser compatibility

See also