# 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 versions of the ECMAScript language. ES5, or ECMAScript 5, was standardized in 2009, while ES6, also known as ES2015, came out in 2015. ES2015 was a major update, introducing new features like classes, arrow functions, and modules, which reduced the need for boilerplate code in ES5. ES6 also added the 'symbol' data type and new variable declaration methods using 'let' and 'const', unlike ES5 which only used 'var'.

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

JScript is Microsoft's version of ECMAScript used in older Internet Explorer versions. ActionScript is an object-oriented language from Macromedia (later Adobe) for the Adobe Flash platform. ECMAScript is the standard that defines these languages, ensuring web page interoperability across browsers. JavaScript, JScript, and ActionScript all implement ECMAScript, sharing core features but also having unique extensions. JavaScript was developed by Netscape, JScript by Microsoft, and ActionScript for Flash.

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

The ECMAScript Language Specification is a key JavaScript standard defining the language. Maintained by Ecma International, the latest version is available on their website at www.ecma-international.org/publications-and-standards/standards/ecma-262/.

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

* + **V8:** Developed by Google for Chrome and Node.js, compiles JavaScript to native machine code.
  + **SpiderMonkey:** Mozilla's engine for Firefox, also compiles JavaScript to native code.
  + **Chakra:** Developed by Microsoft, used in older versions of Edge and Internet Explorer.
  + **Tamarin:** An engine by Adobe for ActionScript in Flash Player, discontinued in 2011. These engines execute JavaScript with different performance characteristics and version support, though they all aim to comply with the ECMAScript standard, resulting in minimal differences in behavior.

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

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