

DWA_02.8 Knowledge Check_DWA2

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

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.

The table differentiate between ES5 and ES2015 or ES6.

It is the fifth version or edition of ECMAScript.	It is the sixth version or edition of ECMAScript.
It was released in 2009.	It was released in 2015.
It supports primitive data types: string, number, boolean, null & undefined.	It has a new primitive data type named Symbol , which supports unique values.
The var keyword in JavaScript is used for defining variables .	The var, let and const keywords are used for defining variables in JavaScript.
Due to the absence of some features, the performance of ES5 is lower than ES6.	Due to the presence of new features, ES6 or ES2015 has higher performance than ES5.
The Manipulation of objects in ES5 or ECMAScript 2009 is more time-consuming.	The Manipulation of objects in ES6 or ECMAScript 2015 is less time-consuming than ES5.

In ES5 or ES 2009, both function & return keywords are used for defining the function.	In ES6 or ES 2015, a new feature of the arrow function was introduced, in which the function keyword is not used for defining a function.
It offers a wider range of communities supporting ES5 or ES 2009 compared to ES6.	It offers a lower range of communities supporting ES6 or ES 2015 compared to ES5.
A traditional for loop like other programming languages is used for iterating the elements of iterable objects.	In ES6, a for...of the loop is introduced for iterating the elements of iterable objects.

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

ECMAScript is a simple standard for JavaScript and adding new features 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. As a comparison, AS/JS/JScript are 3

different cars, but they all use the same engine... each of their exteriors

is different though, and there have been several modifications done to each to make it unique.

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

The standards for JavaScript are the ECMAScript Language Specification (ECMA-262) and the ECMAScript Internationalization API specification (ECMA-402). As soon as one browser implements a feature, we try to document it.

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

V8 is the name of the JavaScript engine that powers Google Chrome. It's the thing that takes our JavaScript and executes it while browsing with Chrome. V8 is the JavaScript engine i.e. it parses and executes JavaScript code.

SpiderMonkey is the JavaScript and WebAssembly implementation library of the Mozilla Firefox web browser. The implementation behavior is defined by the ECMAScript and WebAssembly specifications.

Chakra is a free and open-source JavaScript engine developed by Microsoft for its Microsoft Edge Legacy web browser. It is a fork of the same-named JScript engine used in Internet Explorer. Like the

EdgeHTML browser engine, the declared intention was that it would reflect the "Living Web".

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.

5. Show a practical example using caniuse.com and the MDN compatibility table.
