## DWA\_02.8 Knowledge Check\_DWA2

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

They all refer to different iterations or versions of Javascript, 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)

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

<u>JScript</u>: A Microsoft scripting language that came about from reverse engineering Javascript because JavaScript was an exclusive proprietary scripting language at the time.

ActionScript: A well-known Javascript knock-off created by Macromedia

<u>ECMAScript</u>: A single standardized scripting language that consolidates/unifies what was formerly known as Javascript and JScript.

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

"The ECMAScript language implicitly performs automatic type conversion as needed. To clarify the semantics of certain constructs it is useful to define a set of conversion abstract operations. The conversion abstract operations are polymorphic; they can accept a value of any ECMAScript language type. But no other specification types are used with these operations.

must call BigInt explicitly to convert values from other types."
This specification can be found on the ECMA website: <a href="mailto:ECMAScript® 2021 Language Specification">ECMAScript® 2021 Language Specification (ecma-international.org)</a>
4. What are v8, SpiderMonkey, Chakra and Tamarin? Do they run JavaScript differently?
JavaScript compilers.  Yes, there can be differences in how JavaScript compilers (or JavaScript engines) run JavaScript code. Each compiler may have its own unique optimizations and execution strategies, which can result in variations in performance and behavior.
5. Show a practical example using <b>caniuse.com</b> and the MDN compatibility table.

The BigInt type has no implicit conversions in the ECMAScript language; programmers



