

## Week 4 Research Assignment

1. Var, Let, and Const are developers' best friends for creating variables. However, they are different. If you're going to have a variable that will change, you want to assign your variable using var or let. Var is the oldest way to declare in JavaScript and is also used in the global scope, while Let is the newer version. Let is only accessible in the block scope and can not be called outside of it. You can reassign the let variable later on when coding, but Const will never. Developers use the const keyword for variables they do not want to be touch. It indicates to not only themselves, but to people reading their code that that variable is not meant to be altered and helps prevent bugs.

URL: <https://www.geeksforgeeks.org/difference-between-var-let-and-const-keywords-in-javascript/>

2. Some new features with ES6 are arrow functions. Arrow functions are just a shorter and cleaner way to write functions, especially for one liner functions. You don't need to declare the function keyword and if it is only one parameter, you can skip the parenthesis. It does not completely replace normal functions, but it's beneficial for quick functions. Another new feature would be Template Literals. Template Literals allows concatenating strings much easier instead of using multiple "+" signs., making the code look cleaner. Handling arrays got some features, including the ".map()" method. It allows us to add a function, a callback function, to the elements of an array and create a new array with the results.

URL: [https://www.w3schools.com/js/js\\_es6.asp](https://www.w3schools.com/js/js_es6.asp) , [https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Template\\_literals](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Template_literals) , [https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global\\_Objects/Array/map#specifications](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Array/map#specifications)