

# John Berry Week 4 Research

What are the differences between var, let, and const?

In javascript var, let, and const are vital for it's functions. There's a few differences between the 3 types of variables. Var variables that are declared outside of an function are globally scoped and are accessible inside of a function. If var is declared in a function then it's locally scoped and cannot be accessed outside of a function and will be declared as undefined. Let variables are block scoped meaning that a let variable is only available in that block contained by curly braces {} but if declared outside of a block it can be accessed within any block. The let value can be updated but cannot be redeclared. A declared let valuable that's declared globally and locally are treated as two separate valuables. Like let variables const variables are block scoped but cannot be updated or re-declared.

[https://developer.mozilla.org/en-US/docs/Learn/JavaScript/First\\_steps/Variables](https://developer.mozilla.org/en-US/docs/Learn/JavaScript/First_steps/Variables)

What are some features that are new with ES6?

There are many featured added to Javascript with ES6. Arrow functions makes writing functions easier to read and easier to implement. Let variables makes it possible to declare the same variable name in both global scope and block scoped. Const variable that sets a constant variable that cannot be changed. String repeat represented by .repeat() will repeat a string to the end of the original string the indicated amount of times.

[https://www.w3schools.com/js/js\\_es6.asp](https://www.w3schools.com/js/js_es6.asp)