Javascripts Basics

If operating arrays with functional operators feels foreign to you, it is worth watching at least the first three parts of the YouTube video series [Functional Programming in JavaScript](https://www.youtube.com/playlist?list=PL0zVEGEvSaeEd9hlmCXrk5yUyqUag-n84):

* [Higher-order functions](https://www.youtube.com/watch?v=BMUiFMZr7vk&list=PL0zVEGEvSaeEd9hlmCXrk5yUyqUag-n84)
* [Map](https://www.youtube.com/watch?v=bCqtb-Z5YGQ&list=PL0zVEGEvSaeEd9hlmCXrk5yUyqUag-n84&index=2)
* [Reduce basics](https://www.youtube.com/watch?v=Wl98eZpkp-c&t=31s)

High Order Functions (Used for Composition):

Var triple = function (x) {

return x\*3

}

Var waffle = triple

Waffle (30)

Here a function is set as n number of values which is a general function and it is working as a variable such that if you use it again anytime you can use the complete function again by just changing the parameters used in it.

1. Filter: Most basic and higher-order function is filter; Filter is a function on the array that accepts another function as its argument. Filter accepts one argument only.

var animals = [

{name: 'Hob', species: 'cat'},

{name: 'Mar', species: 'cat'},

{name: 'Bul', species: 'dog'},

{name: 'Cr7', species: 'goat'},

{name: 'Messi', species: 'goat'}

];

// Filter Function Applied

var dogs = animals.filter(function(animal){

return animal.species == ‘dog’

})

Filter will loop through each item in the array and for each item it's going to pass it [into] the callback function and When it does it will expect the callback function to return either true, or false to tell filter whether or not this item should be in the new array and After it's done. It will return the new filtered array, and that will be dogs.