

Week 2 Research

1. What are the different loops JavaScript provides us with?

There are 5 different types of loops provided by JavaScript:

- A. For
- B. For In
- C. For Of
- D. While
- E. Do/While

Each type of loop has different uses in JavaScript to help us complete tasks in different ways. For loops are usually used to execute code a specific number of times and can use 3 different items to define the loop better although they do not have to be used. They are initialization, condition and final expression. Each will have a part to play in the loop to define the parameters the loop should follow in the block of code within the loop before the loop ends. For In can be used to loop through property names while For Of will loop through the property values. A While Loop is used when you need to run a task repeatedly until the required condition is met but you don't know how many times it may take to complete. A Do/While Loop is almost the same as the while loop but it will check the condition at the end of the loop rather than the beginning so the code will run at least one time where the While loop may never run.

References - [Freecodecamp.com](https://www.freecodecamp.com) and [tutorialrepublic.com](https://www.tutorialrepublic.com)

2. What is the syntax of one of the loops in your above answer? How and when should you use this loop? Give an example.

The syntax of a For Loop goes something like this. Start with the For statement followed by the open parentheses. Then add your initialization, test condition and add/decrease statement, then close your parentheses. Next add your open curly bracket and on a new line write you code you wish to execute in the loop, then close your curly bracket. It would look something like this:

```
For (i=1; i<10; i++){  
  Console.log(i);  
}
```

This would write out the numbers 1-9.

You should use this type of loop when you know how many times you want your loop to run before your code moves to the next step.

References – [study.com](https://www.study.com) and Promineo tech week 2 material