

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

- For
- For in
- For of
- While
- Do while

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.

```
For (let i = 10; i >= 1; 1--){  
}
```

For loops are good to use if you want to run the same portion of code repeatedly a known number of times. This would be useful if for example if you need to check the number of seats left on a plane.

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

```
Let i = 0;  
While (i < 5) {  
    i++;  
}
```

A while loop will keep repeating as long as the condition inside of the parenthesis continues to remain true. This could be used if you do not know how many times a user may enter a specific value, it would just keep repeating until the condition becomes false.

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

```
Let i = 1;
```

```
Do {  
  i++;  
} while (i <= 10);
```

A do while loop will check the condition at the end of the loop first, so it will always run at least once, even if the condition is never true, it will then continue to run until the condition is true. If you are listening to music on Spotify or Apple music and have a song on repeat, this would be an example of a for loop, it would continue to run until you turn off repeat.

5. What is your favorite thing you learned this week?

Creating a user input was my favorite part of this week's lesson. It took me a little while to wrap my head around how to do some of the various types of loops and get them working correctly, but I think I'm starting to figure it out slowly but surely.

Sources:

https://www.w3schools.com/js/js_loop_for.asp

https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Loops_and_iteration

<https://www.codecademy.com/learn/introduction-to-javascript/modules/learn-javascript-loops/chatsheet>