JavaScript ES6 Concepts:

1. What is the difference between map, forEach, and filter?

a. map: Returns a new array with the results of applying a function to each element of the original array.
b. forEach: Executes a provided function once for each array element, but does not return a new array.
c. filter: Returns a new array containing all elements of the original array that pass a test implemented by the provided function.

2. What is the difference between filter and find?

a. filter: Returns an array of all elements that pass the test implemented by the provided function.
b. find: Returns the value of the first element in the array that satisfies the provided testing function or undefined if no values satisfy the testing function.

3. Difference between for..of and for..in?

a. for..of: Iterates over the values of an iterable object (like arrays, strings, etc.).
b. for..in: Iterates over the enumerable properties (keys) of an object.

4. How do you empty an array?

a. By setting the array's length to 0: array.length = 0;

5. Difference between class and object?

a. Class: A blueprint for creating objects, defining properties, and methods.

b. Object: An instance of a class, containing specific data and methods as defined by the class.

6. What is a Prototype chain? How does inheritance work in JavaScript?

a. Prototype chain: A mechanism by which objects in JavaScript inherit properties and methods from other objects. Inheritance works by having objects reference a prototype object containing shared properties and methods.

7. What does destructuring do in ES6?

a. Destructuring allows for unpacking values from arrays or properties from objects into distinct variables.

8. Is optional chaining the same as the ternary operator?

a. No, optional chaining (?.) is used to safely access deeply nested properties of an object without having to explicitly check for the existence of each level, whereas the ternary operator (? :) is a conditional operator that assigns a value based on a condition.

9. What do you mean by dot notation and bracket notation? When should you use dot notation or bracket notation?

a. Dot notation: Accessing object properties using a dot (.), like object.property.
b. Bracket notation: Accessing object properties using square brackets ([]), like object['property']. Use bracket notation when the property name is dynamic or not a valid identifier (e.g., has spaces or special characters).