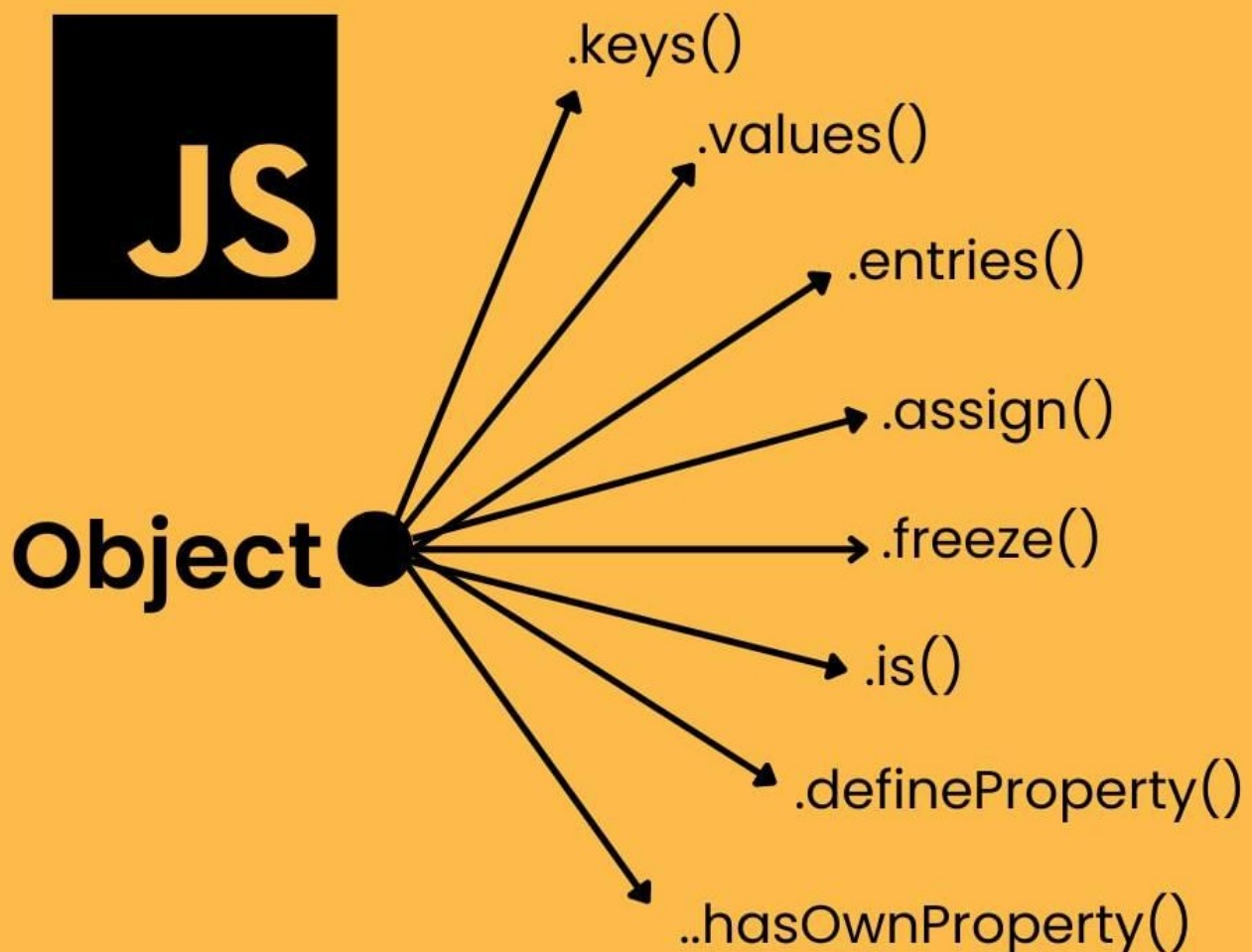


JavaScript Object Methods



1. keys

This method retrieves the names of all the enumerable properties from an object.

It's handy when you need to iterate over properties or when you just want to get a quick overview of the object's structure.



```
1  const car = { make: 'Toyota', model: 'Camry' };  
2  console.log(Object.keys(car)); // ['make', 'model']
```

2. values

This method, similar to `Object.keys()`, gives you the values instead of the keys.

It's particularly useful when you are more interested in the data stored rather than their property names.



```
1 console.log(Object.values(car)); // ['Toyota', 'Camry']
```

3. entries

This method combines both keys and values to produce an array of pairs.

Each pair, represented by an array, consists of a property name followed by its corresponding value.

This can be beneficial when working with functions that expect key-value pairs.



```
1 console.log(Object.entries(car));  
2 // [['make', 'Toyota'], ['model', 'Camry']]
```

4. assign

It's like a photocopier for objects. This method is used to copy values from one or more source objects to a target object.

It's essential when you need to merge objects or create copies with additional properties.



```
1  const details = { color: 'red' };  
2  const carWithDetails = Object.assign(car, details);  
3  console.log(carWithDetails);  
4  // { make: 'Toyota', model: 'Camry', color: 'red' }
```

5. freeze()

Think of this as a protective shield for your object.

Once an object is frozen, you can't add, delete, or modify its properties. It's useful when you want to ensure data integrity.




```
1 Object.freeze(car);  
2 car.year = 2020;  
3 // Throws an error because car is frozen.
```

6. is()

While it may look like the strict equality (`===`) operator, this method has some nuanced differences, especially when comparing NaN values.

It checks if two values are the same, including distinguishing between positive and negative zeros.



```
1 console.log(Object.is('hello', 'hello')); // true
2 console.log(Object.is(NaN, NaN));
3 // true (whereas NaN === NaN returns false)
```


7. `defineProperty()`

This method is your advanced tool for adding new properties or modifying existing ones.

You can set characteristics like enumerability, writability, and configurability for the property, offering fine-grained control over its behavior.



```
1 Object.defineProperty(car, 'year', { value: 2020, writable: false });  
2 console.log(car.year); // 2020
```


8. `hasOwnProperty()`

This method checks if an object has a specific property as its direct property (not inherited from its prototype).

It's a safer way to check for properties than using the `in`-operator, especially when working with objects that might have overridden built-in properties.



```
1 .log(car.hasOwnProperty('make')); // true
```