perplexity

set vs array

Here's a clear comparison of JavaScript's **Set** and **Array**:

Feature	Set	Array
Definition	Collection of unique values, no duplicates allowed	Ordered list of values that can include duplicates
Duplicates	Not allowed	Allowed
Ordering	Iteration order is maintained, but elements are not indexed	Elements are ordered and accessed by numeric index
Access	No direct index access; must use iteration or convert	Direct access using numeric indexes
Performance (lookup)	Fast lookups with internal hash table	Slower lookups (linear search unless sorted)
Methods	`add()`, `delete()`, `has()`, `clear()`	`push()`, `pop()`, `shift()`, `unshift()`, `splice()`, etc.
Use cases	When you need unique values and quick membership checks	When order and duplicate values are needed or allowed

Summary:

- Use a **Set** when you want guaranteed uniqueness and efficient membership tests.
- Use an **Array** when you need ordered collections, index-based access, or allow duplicate values. [1] [2] [3] [4]

Let me know if you want code samples or practical examples!

1. https://www.geeksforgeeks.org/javascript/set-vs-array-in-javascript/
2. https://www.koladechris.com/blog/what-are-the-differences-between-array-and-set-in-javascript/
3. https://www.w3schools.com/js/js_sets.asp
4. https://www.timveletta.com/blog/array-set-object-map/