

Your grade: 100%

Your latest: **100%** • Your highest: **100%** • To pass you need at least 60%. We keep your highest score.

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1. In JavaScript, what method should you use to add new items to the end of an array?

1 / 1 point

- ☒ push()
- ☐ unshift()
- ☐ pop()
- ☐ shift()

✔ **Correct**

Correct! The push() method adds an item to the end of an array.

2. How do you access the first element of an array in JavaScript?

1 / 1 point

- ☐ arr.start()
- ☒ arr[0]
- ☐ arr[1]
- ☐ arr.first()

✔ **Correct**

Correct! In JavaScript, array indexes start at 0, so the first element of an array can be accessed using arr[0].

3. In React, what method would you commonly use to render lists of elements dynamically?

1 / 1 point

- ☐ filter()
- ☐ reduce()
- ☐ forEach()
- ☒ map()

✔ **Correct**

Correct! The map() method in JavaScript is commonly used in React components to iterate over an array and dynamically render elements based on the array's contents. It allows for concise and efficient rendering of lists.

4. How does React quickly update the DOM when props or state changes?

1 / 1 point

- ☐ By delegating DOM manipulation to the browser
- ☐ By directly manipulating the DOM elements
- ☐ By replacing the entire DOM with a new version
- ☒ By using the Virtual DOM to compute the minimal set of changes needed

✔ **Correct**

Correct! The Virtual DOM is used by React to update the real DOM quickly. When state or props change, React checks the Virtual DOM against the real DOM to see what changes are needed to bring the UI up to date and make those changes.

5. Which of these is true about React's Virtual DOM?

1 / 1 point

- ☒ It's a lightweight, in-memory representation of the actual DOM.
- ☐ It relies on browser-specific implementations for optimization.
- ☐ It eliminates the need for React components.
- ☐ It represents the actual DOM structure of the web page.

✔ **Correct**

Correct! In React, the Virtual DOM is a small copy of the real DOM that is stored in memory. By matching changes made to the Virtual DOM with the real DOM, it lets React do updates quickly.