

1. How do props contribute to component composition in building complex UIs?

1 / 1 point

- ☐ By preserving the state of the component
- ☒ By allowing unidirectional flow of data
- ☐ By customizing the behavior and appearance of your components
- ☐ By creating variations of the same component

☒ **Correct**
Correct! Props enable components to communicate and share data in a structured manner, ensuring predictable data flow within the application.

2. Which component composition principle focuses on making reusable components that encapsulate UI features?

1 / 1 point

- ☐ Props and children
- ☒ Abstraction
- ☐ Hierarchy
- ☐ Reusability

☒ **Correct**
Correct! The abstraction principle means you can make components that encapsulate UI features. Abstraction allows you to hide the implementation details.

3. How is the state managed in function components in React?

1 / 1 point

- ☐ With stateName
- ☒ With the useState hook
- ☐ With side effects
- ☐ With the onClick event handler

☒ **Correct**
Correct! useState hook manages states in function components, allowing the declaration and and update of state variables.

4. Which phase of the functional component's lifecycle involves responding to changes in the component's state or props and reinvoking the function body?

1 / 1 point

- ☒ Updating phase
- ☐ Unmounting phase
- ☐ Mounting phase
- ☐ Error Handling phase

☒ **Correct**
Correct! The functional component's lifecycle updating phase involves responding to changes in the component's state or props and reinvoking the function body.

5. Which **two phases** of the functional component's lifecycle handles errors and prevents them from crashing the entire application?

1 / 1 point

- ☒ Mounting phase

☒ **Correct**
Correct! During the mounting phase, React initializes the functional component, preparing it for rendering on the DOM.

- ☐ Updating phase
- ☐ Unmounting phase
- ☒ Error-handling phase

☒ **Correct**
Correct! The error-handling phase deals with errors occurring during rendering or within a component's lifecycle methods.