

## Section 4 Quiz - Working with Events & State

1. How should you NOT listen to events when working with React?
  - a. **Adding an event listener (e.g. via "addEventListener") manually.**
  - b. Setting an event handler function via props (e.g. `onClick={...}`)
  - c. You can't listen to events, React is about outputting data only.
2. Which value should you pass to event listener props like `onClick`?
  - a. The code that should execute when that event occurs.
  - b. The result of calling a function that should execute when the event occurs.
  - c. **A pointer at the function that should execute when the event occurs.**
3. How can you communicate from one of your components to a parent (i.e. higher level) component?
  - a. **You can accept a function via props and call it from inside the lower-level (child) component to then trigger some action in the parent component (which passed the function).**
  - b. You can accept an event via props and trigger it from inside the lower-level (child) component to then trigger some action in the parent component (which passed the function).
  - c. You can't communicate up, only down - i.e. you can only pass props down to pass data down to a component. You can't trigger an action in a higher-level component.
4. How can you change what a component displays on the screen?
  - a. Use a regular JavaScript variable, change the value and output the variable's value in JSX.
  - b. You can't change the output - components are static in React apps.
  - c. **Create some "state" value (via `useState`) which you can then change and output in JSX.**
5. Why do you need this extra "state" concept instead of regular JS variables which you change and use?
  - a. Because it's less code
  - b. **Because standard JS variables don't cause React components to be re-evaluated**
  - c. Because standard JS variables are not supported in React components
6. Which statement about `useState` is NOT correct?
  - a. It receives an (optional) initial state value as an argument
  - b. **Calling `useState` again will update the state value**
  - c. It returns an array with exactly two elements
7. How can you update component state (created via `useState`)?
  - a. You can assign a new value to the state variable.
  - b. **You can call the state updating function which `useState` also returned.**

- c. You can call `useState` again.
- 8. How much state may you manage in one single component?
  - a. **You can have as many state slices as you need / want.**
  - b. You should at most have one state (merge multiple states into a state object).
  - c. You can have multiple state slices if at least one of them is an object.
- 9. What's wrong about this code snippet? `const [counter, setCounter] = useState(1); ... setCounter(counter + 1);`
  - a. There's nothing wrong about it.
  - b. State can't be a number.
  - c. **If you update state that depends on the previous state, you should use the "function form" of the state updating function instead.**