✓ **Congratulations! You passed!**

Grade received 100%   **Latest Submission Grade** 100%   **To pass** 80% or higher

[Go to next item]

---

1. In React, data flows in one way: from a parent component to a child component. |1 / 1 point|

   ⦿ True

   ○ False

   ✓ **Correct**
   That's correct. The above statement is true.

2. Why is one-way data flow important in React? |1 / 1 point|

   ⦿ It ensures that the data is flowing from top to bottom in the component hierarchy.

   ○ It ensures that the data is flowing from bottom to top in the component hierarchy.

   ✓ **Correct**
   Correct. This ensures that the data is flowing from top to bottom in the component hierarchy.

3. True or false? State data is the data inside a component that a component can mutate. |1 / 1 point|

   ⦿ True

   ○ False

   ✓ **Correct**
   Correct. State data is data inside a component that a component, which that component controls and can mutate.

4. What is prop drilling? |1 / 1 point|

   ⦿ Prop drilling is a situation where you are passing data from a parent to a child component, then to a grandchild component, and so on, until it reaches a more distant component further down the component tree, where this data is required

   ○ Prop drilling is a situation where you are passing data from a child, to a parent component, then to a grandparent component, and so on, until it reaches a more distant component further up the component tree, where this data is required.

   ✓ **Correct**
   Correct. Prop drilling is a situation where you are passing data from a parent to a child component, then to a grandchild component, and so on, until it reaches a more distant component further down the component tree, where this data is required

5. The distinction between stateful and stateless components is that the latter doesn't have its own state. |1 / 1 point|

   ⦿ True

   ○ False

   ✓ **Correct**
   That's correct! This statement is true.

6. Choose the correct statement. |1 / 1 point|

   ○ Remember that you should always change the values of props in children components; you should never work with them as they are. In other words, props are mutable.

   ⦿ Remember that you should never change the values of props in children components; you should only work with them as they are. In other words, props are immutable.

   ✓ **Correct**

That's correct! Props are immutable and thus you should not attempt to update them in children components.

7. Is this code valid?

1 / 1 point

```
1   function App() {
2     const handler = () => console.log('fourth example')
3     return (
4       <div>
5         <button onClick = {handler} >
6           Click Me!
7         </button>
8       </div>
9     )
10  }
11  export default App
```

◉ Yes

○ No

✓ **Correct**
Correct! This code is an example of a valid onClick event handler.

8. Is this code valid?

1 / 1 point

```
1   <button onClick={ () => console.log('clicked') }>
2     Click me
3   </button>
```

◉ Yes

○ No

✓ **Correct**
Correct! This code is an example of a valid onClick event handler.

9. Select the correct statement: The useState hook...

1 / 1 point

◉ ... lets you hook into React state and lifecycle features from a component.

○ ...is not part of React; you must import it from a third-party package.

○ ... has a convention that if the state variable is named, for example, *counter*, the function to update this counter variable should be named *counterFunction*.

○ ... should never be called at the top level of a React component.

✓ **Correct**
Correct.

10. The Context API allows you to:

1 / 1 point

◉ Avoid having to pass state down through multiple levels of components.

○ Avoid having to use the return statement in a child component.

○ Avoid having to keep your components modular.

✓ **Correct**
Correct. Using Context API allows you to bypass having to pass state down through multiple levels of components.