1. pure and impure function.  
   pure function:

Pure functions are functions that accept an input and returns a value without modifying any data outside its scope(Side Effects). Its output or return value must depend on the input/arguments and pure functions must return a value.  
https://blog.bitsrc.io/understanding-javascript-mutation-and-pure-functions-7231cc2180d3#:~:text=Pure%20functions%20are%20functions%20that,its%20scope(Side%20Effects).&text=The%20above%20function%20is%20impure,dependent%20on%20the%20input%20arg%20.

Impure function:

For example an impure function that has a side effect on a variable outside of its own scope:

var count = 0;

function increaseCount(val) {

count += val;

}

1. function and class oriented
2. Dom and virtual dom
3. **HOC**

Higher-order component is a function that takes a component and returns a new component.  
i.e connect in redux.  
const hoc = connect(mapStatetoProps,mapDispatchToProps)

const comp = hoc(POSTS)

export default comp;  
<https://reactjs.org/docs/higher-order-components.html>

1. generator function VS simple function  
   Normal function:

A normal function such as this one cannot be stopped *before* it finishes its task i.e its last line is executed. It follows something called [run-to-completion](https://en.wikipedia.org/wiki/Run_to_completion_scheduling) model.

Generator function:

In contrast, a generator is a function that **can stop midway** and then continue *from where it stopped.*  
<https://codeburst.io/understanding-generators-in-es6-javascript-with-examples-6728834016d5>

1. **Closure:**

**Closures** are inner functions that have access to the outer function's variables and parameters. ... Every time the SayHi component is rendered, a new anonymous function is created and passed to Button component

https://blog.logrocket.com/5-common-practices-that-you-can-stop-doing-in-react-9e866df5d269/#:~:text=Closures%20in%20React,outer%20function's%20variables%20and%20parameters.&text=But%20when%20you%20are%20using,and%20passed%20to%20Button%20component.