

## ~~9.5~~ 9.5

When you have multiple subclasses inherit from a superclass, a inheritance hierarchy can be made to see the visual inheritance between parent and children.

In Java, the class object will always be at the top of the hierarchy because every class in Java inherits from Object.

### 9.5.1

A superclass reference variable can hold an object of that superclass or of any of its subclasses.

A variable cannot from a subclass and be declared in a superclass object.

Using a superclass reference for subclass objects can allow for writing methods with parameters/arrays from the parent in any of the child classes.

### 9.5.2

An inheritance hierarchy ~~is that~~ as well allows methods to have parameters of the parent ~~class~~ type and pass the child objects to them.

### 9.5.3

Using inheritance hierarchies allows for arrays and ArrayLists using the superclass type and apply values of the subtype class.