

## Java Inheritance – All-in-One Revision Table

<b>Definition</b>	Child class inherits properties & methods from Parent class
<b>Keyword</b>	<i>extends</i> (used to create inheritance)
<b>Basic Syntax</b>	<code>class Child extends Parent { }</code>
<b>Access in Child Class</b>	<code>Child c = new Child();</code> <code>c.methodFromParent();</code>
<b>Reusability</b>	Code from parent can be reused without rewriting
<b>Method Access</b>	Inherited methods can be called directly
<b>Types of Inheritance</b>	1. Single ✅ 2. Multilevel ✅ 3. Hierarchical ✅ 4. Multiple ❌ (use interfaces)
<b>Example</b>	<code>class Vehicle { void start(){} }</code> <code>class Car extends Vehicle { }</code>
<b>Constructor in Inheritance</b>	Parent constructor runs <i>first before</i> child constructor
<b>Use of <i>super</i></b>	Refers to parent class (e.g., <code>super.start();</code> , <code>super.variable</code> )
<b>Benefits</b>	✅ Code Reuse    ✅ Clean Structure ✅ Easy Maintenance
<b>Limitations</b>	❌ No multiple inheritance with classes