

Distinguish, differentiate, compare and explain what is the difference between Unit cell and Primitive cell. Comparison and Differences.

## Differences between Unit cell and Primitive cell

S.No.	Unit Cell	Primitive Cell
1	Unit cell is the smallest fundamental building block with all the characteristics & the repetition of which forms the entire crystal.	It is the smallest building block, the repetition of which in three dimensions fills the entire space and it is equivalent to one lattice point.
2	It is the basic structure unit.	It has the smallest volume containing one lattice point.
3	The lattice is made up of the repetition of unit cell.	It is also unit cell which contain one lattice point only at the corners.
4	In three dimension a unit cell may be a cube formed by the fundamental translation vectors a, b, c.	The axial lengths a,b,c will be minimum and they are called primitives.
5	All unit cells are primitive cells.	All primitive may be or not unit cells.