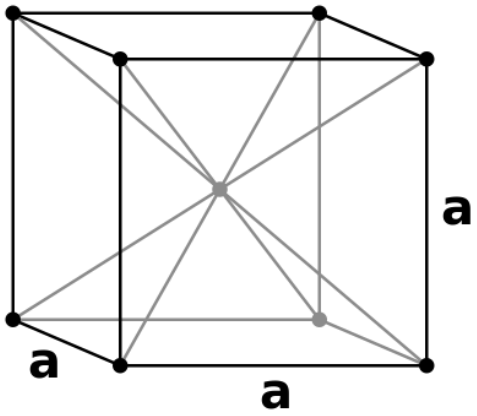
In crystallography, the cubic (or isometric) crystal system is a crystal system where the unit cell is in the shape of a cube. This is one of the most common and simplest shapes found in crystals and minerals.

BCC is Body-centered cubic:



The body-centered cubic system (bcc) has one lattice point in the center of the unit cell in addition to the eight corner points. It has a net total of 2 lattice points per unit cell (1⁄8 × 8 + 1).

So number of atoms per unit cell for bcc is **2**.

Number of atoms in 9.2 g of Na is:

N=n*NA,where

n is amount (n=m/Mr, Mr for Na is 23)

NA is Avogadro constant ($6.02*10^{23}$ atoms mol^{-1})

N=(9.2/230)* $6.02*10^{23}$ = $\mathbf{2.408*10^{23}}$

So number of unit cells is:

$2.408*10^{23} / 2 = \boldsymbol{1.2044*10^{23}}$