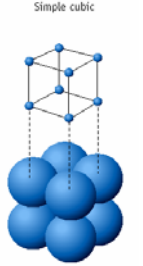
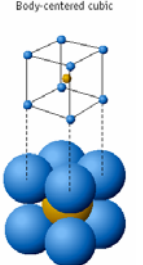
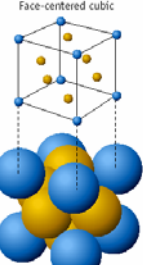


Unit Cell	Picture	# of Atoms	Where Atoms Touch	Dimension of where atoms touch in terms of radii	Dimension of where atoms touch in terms of side of cube	% Used of cube
Simple Cubic (SC)		1	Side (S)	2r	s	~52.4%
Body Centered Cubic (BCC)		2	Body Diagonal (BD)	4r	$\sqrt{3} \cdot s$	~68.0%
Face Centered Cubic (FCC)		4	Face Diagonal (FD)	4r	$\sqrt{2} \cdot s$	~74.0%
Edge Centered Cubic (ECC)		4	Side (S)	4r	s	

Remember:

$$\text{Vol}_{\text{cube}} = S^3$$

$$\text{Density} = \frac{\text{mass}}{\text{volume}}$$

You can change atoms into moles and moles into mass