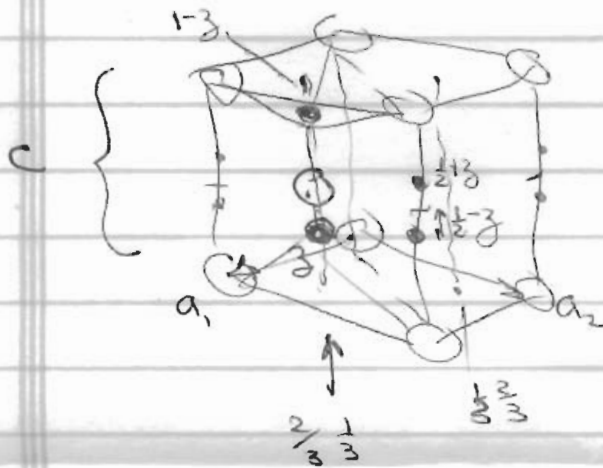
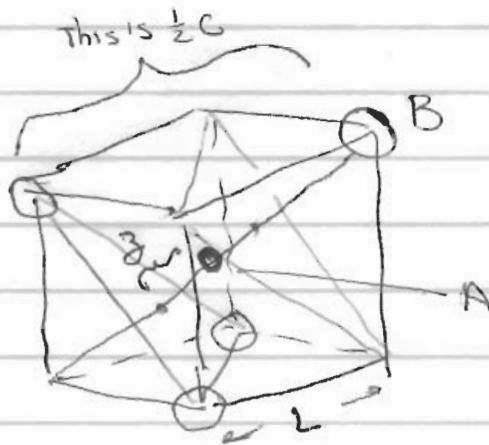


# COORDINATES OF TETRAHEDRAL SITES IN hcp



LOOKING AGAIN AT A TETRAHEDRON

INSCRIBED IN A CUBE



$L$ , EDGE, OF CUBE IS DETERMINED BY A-B CONTACT

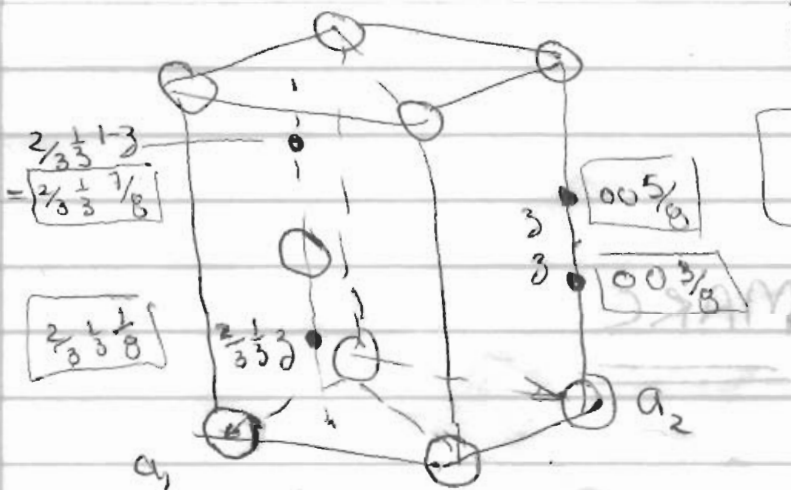
$$\frac{1}{2} L \sqrt{3} = R_A + R_B$$

$$\frac{1}{2} C = \frac{2}{3} L \sqrt{3}$$

$$3 = \frac{1}{2} L \sqrt{3} - \frac{1}{3} L \sqrt{3} = \frac{1}{6} L \sqrt{3}$$

$$\frac{3}{C} = \frac{\frac{1}{6} L \sqrt{3}}{\frac{1}{3} L \sqrt{3}}$$

$$\frac{3}{C} = \frac{3}{4} \frac{1}{6} = \frac{1}{8}$$



$$\frac{2}{3} \frac{1}{3} \frac{1}{8}$$

$$\frac{2}{3} \frac{1}{3} \frac{1}{8}$$

$$\frac{2}{3} \frac{1}{3} \frac{1}{8}$$

$$\frac{005}{8}$$

$$\frac{003}{8}$$

COORDINATES:

$$\frac{2}{3} \frac{1}{3} \frac{1}{8}$$

$$\frac{2}{3} \frac{1}{3} \frac{7}{8}$$

$$00 \frac{3}{8}$$

$$00 \frac{5}{8}$$

NB: 2 spheres/cell 4 tet sites/cell