

MODEL ACTIVITY TASKS
CLASS – XII
CHEMISTRY

Chapter : Solid state

Write the answers to the following questions :

1. Calculate the number of atoms and the packing fraction in a simple cubic unit cell .
2. An element forms a simple cubic unit cell .If the radius of an atom of the element is 1.53 \AA calculate the internuclear distance between neighbouring atoms in the unit cell.
3. Metallic copper forms a face-centred cubic unit cell. The density of copper is 8.9 g/cm^3 and atomic weight of copper is 63.5. Calculate the edge length of the unit cell.
4. Both diamond and graphite are covalent crystalline solids. Neither consists of small covalent molecules . Yet the physical properties of diamond and graphite differ significantly. Explain.

Students will write answers to these activity tasks in subject specific exercise books at home, and submit the exercise books to respective subject teachers after schools reopen.
Under no circumstance, students will go out of home.