

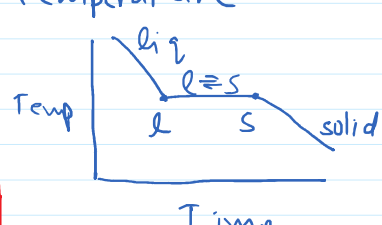
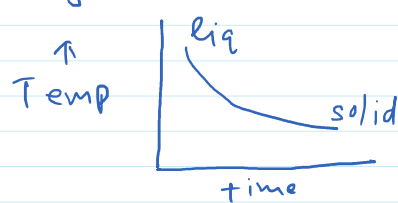
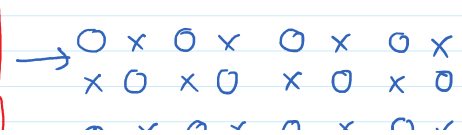
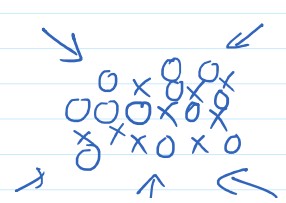
Classification of solids on the basis of nature of order present in the arrangement of their constituent particles

i) Crystalline Solids :

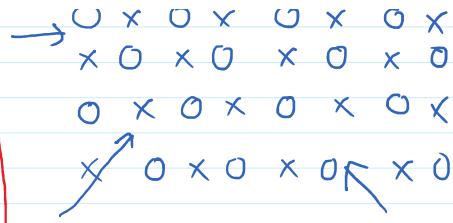
The arrangement of constituent particles (atoms, molecules or ions) is ordered. It has long range order which means that there is a regular pattern of arrangement of particles which repeats itself periodically over the entire crystal.

ii) Amorphous solid:

An amorphous solid consists of particles of irregular shape. The arrangement of constituent particles has short range order, a regular and periodically repeating pattern is observed over short distances only.

Property	Crystalline	Amorphous
1. Shape	Definite characteristic geometrical shape	Irregular shape
2. Melting point	Melt at a sharp and characteristic temperature 	Gradually soften over a range of temperature. 
3. Heat of fusion	They have a definite and characteristic heat of fusion	They do not have definite heat of fusion
4. Anisotropy		

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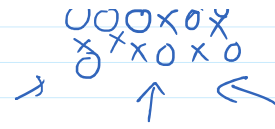
Anisotropic in nature

5. Order in arrangement of constituent particles

Long range order

6. Examples

NaCl, Quartz



Isotropic in nature

Short range order

Rubber, plastic, glass, amorphous silica