



SOLIDS → AMORPHOUS

↓
CRYSTALLINE

- no regular repeating pattern

- IMF's - waxes, plastics, glass, asphalt

⇒ 3D repeating geometric pattern

→ MOLECULAR ⇒ IMF's < ice >

- ↓ mp
- soft, crumbly

→ COVALENT (NETWORK) ⇒ COVALENT bonds → diamond, gem

- ↑↑↑ mp
- HARD

→ IONIC ⇒ IONIC BOND → rocks

- ↑ mp, hard
- brittle
- nonconducting as solids
- conducts as molten or aqueous

→ METALLIC ⇔ METALLIC BOND

- malleable, ductile
- "shiny"
- conductors
- ↑ mp