**QUESTIONS**

**TEXTBOOK**

***Page(s)* ANSWERS**

|  |  |  |
| --- | --- | --- |
| Describe the solid state according to the kinetic-molecular theory. | 337 | The kinetic molecular theory states that all matter is made up tiny constantly moving particles. in a gas they are spread out very far from eachother, a liquid is closer together and a solid is packed tightly. when these materials are heated the particles begin to move faster making more friction which causes changes in state, such is call the heat if fusion and vaporization.  Need to annotate you LNG as you progress in reading or during Tagami’s lecture. |
| What is the difference between an amorphous solid and a crystalline solid? | 338 | Amorphous solid, any noncrystalline solid in which the atoms and molecules are not organized in a definite lattice pattern. Such solidsinclude glass, plastic, and gel. |
| Compare and contrast the four types of crystals. | 339-340 | Covalent, Metallic, and Ionic crystals have high melting points and densities, but molecular crystals tend to be soft and has a lower melting point. |
| Why do crystalline solids shatter into regularly shaped fragments when broken? | 340-341 | 1. Crystalline solids shatter into regularly shaped fragments because they are made from atoms linked by ionic bonding that allow for geometric structures such as: hexagonal, cubic, and tetrahedral. Ionic crystals, covalent network crystals and metallic crystals are all similar in that they all have high melting points. |

These questions have already been used in the chapter outline. It would be more beneficial to make up your own questions so you know what you need to review, imo.

Proofreading is a good idea.

1. **Summary**: The kinetic molecular theory states that all matter is made up tiny constantly moving particles. in a gas they are spread out very far from eachother, a liquid is closer together and a solid is packed tightly. when these materials are heated the particles begin to move faster making more friction which causes changes in state, such is call the heat if fusion and vaporization. Amorphous solid, any noncrystalline solid in which the atoms and molecules are not organized in a definite lattice pattern. Such solidsinclude glass, plastic, and gel. Crystalline solids shatter into regularly shaped fragments because they are made from atoms linked by ionic bonding that allow for geometric structures such as: hexagonal, cubic, and tetrahedral. Ionic crystals, covalent network crystals and metallic crystals are all similar in that they all have high melting points.