1. The best determiner of the polarity of a molecule is its _____.

(A) intermolecular bond
(B) intramolecular bond
(C) magnetic strength
(D) crystal structure

2. What determines the polarity of a molecule?

(A) the distribution of electrons in the molecule
(B) the orientation of the molecule
(C) the mobility of the molecule
(D) the shape of the molecule

3. Which statement is true?

(A) The more polar a molecule is, the stickier it is.
(B) The smaller a molecule is, the stickier it is.
(C) The more mobile a molecule is, the stickier it is.
(D) The more energy a molecule has, the stickier it is.

4. The reason ionic crystals crack so easily when tapped with a hammer is that _____.

(A) ionic crystals transmit the mechanical force of a hammer very rapidly
(B) electrical repulsion develops between columns when the crystal is tapped
(C) hammering a crystal causes the atoms inside the crystal to rapidly heat up and vibrate apart
(D) hammering a crystal stuns the electrical force holding the positive and negative ions in the crystal together

5. The reason ionic crystals resist heat so well is that _____.

(A) the intramolecular bonds inside the crystal are so strong
(B) the intermolecular bonds inside the crystal are so strong
(C) both the intramolecular and intermolecular bonds are so strong
(D) the intramolecular and intermolecular bonds do not transfer heat well
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6. When sodium and chlorine atoms formed sodium and chloride ions in an ionic crystal _____.

(A) every pair of sodium and chloride ions became indistinguishable from every other pair of sodium and chloride ions
(B) every pair of sodium and chloride ions became a “formula unit”
(C) every other atom became a positive ion
(D) All three answers are true.

7. Because sodium chloride crystals consist of sodium and chloride ions lined up in rows and columns _____.

(A) sodium chloride crystals form flat, thin plates
(B) sodium chloride crystals form cubes
(C) there are open spaces between the rows and columns that make sodium chloride crystals transparent
(D) sodium chloride crystals can be compressed