

Phone: +442081445350

www.chemistryonlinetuition.com

Email:asherrana@chemistryonlinetuition.com

CHEMISTRY

MULTIPLE CHOICE - 2

CHEMICAL BONDING

ChemistryOnlineTuition Ltd reserves the right to take legal action against any individual/ company/organization involved in copyright abuse.

Chemical Bonding - 2

1.	As the number of carbon atoms in the homologous series of alkane molecules increases, for which property
	of the alkanes does the numerical value decrease?

- (A) density
- (B) enthalpy
- (C) number of isomers
- (D) vapour pressure

2. Which type of bond is responsible for intermolecular forces in liquid tetrachloromethane, CCI₄?

- (A) covalent bonding
- (B) hydrogen bonding
- (C) induced dipole induced dipole attractions
- (D) permanent dipole permanent dipole attractions

3. Which one of the following molecules will have no permanent dipole?

- (A) C_2CI_4
- (B) CF₂CI₂
- (C) C_2H_5CI

(D) CHCl₂

4. Which equation defines the lattice energy of the ionic compound XY?\

- (A) $X(s) + Y(s) \rightarrow XY(s)$
- (C) $X^+(s) + Y^-(s) \to XY(s)$
- (B) $X(g) + Y(g) \rightarrow XY(s)$
- (D) $X^+(s) + Y^-(s) \to XY(s)$

5. The lattice energies of the compounds caesium chloride, caesium fluoride, sodium chloride and sodium fluoride are given below.

Which value corresponds to the lattice energies of the compound caesium chloride, caesium fluoride are given below.

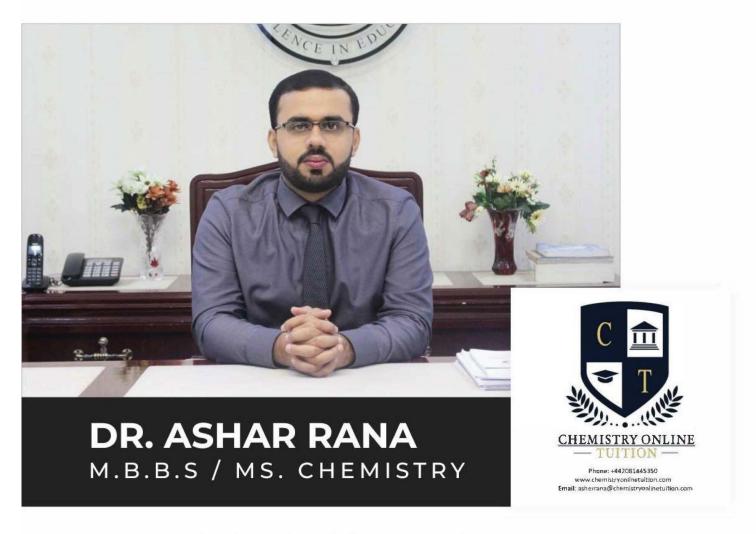
Which value corresponds to the lattice energy of caesium chloride?

- (A) -661 kJ mol⁻¹
- (B) -747 kJ mol⁻¹
- (C) -780 kj mol⁻¹
- (D) -918 kJ mol⁻¹

6. Which of the following isomers is likely to have the highest boiling point?

- (A) $(CH_3)_2CHCH(CH_3)_2$
- (C) $CH_3CH_2CH(CH_3)CH_2CH_3$
- (B) $(CH_3)_2CHCH_2CH_2CH_3$
- (D) $CH_3CH_2CH_2CH_2CH_3$

			www.chemistryon	linetuiti	ion.com				
7. Wha	t is the approximate va	alue of t							
(A)	-45°	(B) 9	0°	(C)	109°	(D)	120°		
8. Whic	ch one of the following	structu	ıral features is comı	non t	to both diamond and grap	hite?			
(A)	a carbon- carbon bond length equal to that in ethane								
(B)	covalent bonds between carbon atoms								
(C)	delocalized electrons								
(D)	D) each carbon atom bonded to four others								
3. A mixture of aqueous silver nitrate and aqueous potassium cyanide, KCN, is used for electroplating.									
The mix	cture contains the com	plex ior	n [Ag(CN) ₂]-						
What is	the carbon-silver-carb	on bon	d angle?						
(A)	104°	(B) 1	109.5°		(C) 120°	(D)	180°		
10. Whi	ich of the following is a	a propei	rty of a solution of o	lry hy	drogen chloride in dry me	ethylb	enzene?		
(A)	It has a pH less than 7.								
(B)	It is a non-conductor of electricity.								
(C)	It reacts with magnesium to give hydrogen.								
(D)	D) It reacts with dry copper (II) oxide on warming to give a blue solution.								



- · Founder & CEO of Chemistry Online Tuition Ltd.
- Completed Medicine (M.B.B.S) in 2007
- Tutoring students in UK and worldwide since 2008
- · CIE & EDEXCEL Examiner since 2015
- · Chemistry, Physics, Math's and Biology Tutor

CONTACT INFORMATION FOR CHEMISTRY ONLINE TUITION

- · UK Contact: 02081445350
- · International Phone/WhatsApp: 00442081445350
- Website: www.chemistryonlinetuition.com
- · Email: asherrana@chemistryonlinetuition.com

Address: 210-Old Brompton Road, London SW5 OBS, UK