



CHOOSE THE CORRECT ANSWER

NO	QUESTION	ANSWER
1	<p>Identify the species that NOT involves dative bond.</p> <p>A. <math>\text{H}_2\text{O}</math>            B. <math>\text{H}_3\text{O}^+</math>            C. <math>\text{NH}_4^+</math>            D. <math>\text{Al}_2\text{Cl}_6</math></p>	<p>A B C D</p>
2	<p>How many resonance structures can be drawn for phosphate ions, <math>\text{PO}_4^{3-}</math>?</p> <p>A. 2                      C. 4            B. 3                      D. none</p>	<p>A B C D</p>
3	<p>The most plausible Lewis structure for a chlorate ion, <math>\text{ClO}_3^-</math>, should show contain _____ single bond(s), _____ double bond(s), and _____ lone pair(s).</p> <p>A. 2, 1, 10              C. 3, 0, 10            B. 1, 2, 8              D. 2, 1, 9</p>	<p>A B C D</p>
4	<p>Which Lewis structure best represents ozone molecule, <math>\text{O}_3</math>?</p> <p>A. <math>\text{:}\ddot{\text{O}}\text{--}\ddot{\text{O}}\text{--}\ddot{\text{O}}\text{:}</math>            B. <math>\text{:}\ddot{\text{O}}\text{--}\ddot{\text{O}}\text{=}\ddot{\text{O}}\text{:}</math>            C. <math>\text{:}\ddot{\text{O}}\text{--}\ddot{\text{O}}\text{=}\ddot{\text{O}}\text{:}</math>            D. <math>\text{:}\ddot{\text{O}}\text{--}\ddot{\text{O}}\text{=}\ddot{\text{O}}\text{:}</math></p>	<p>A B C D</p>



5	<p>The formal charge on the bromine atom in <math>\text{BrO}_3^-</math> drawn with three single bonds is</p> <p>A. -2                      C. +1 B. -1                      D. +2</p>	<p>A B C D</p>
6	<p>11. What is the picture showing?</p> <p>A. The resonance structure of carbonate ions. B. The formal charge of each atom in carbonate. C. The electronegativity of carbonate. D. The geometrical shape of carbonate.</p>	<p>A B C D</p>
7	<p>Which molecule has central atom that obeys octet rule?</p> <p>A. <math>\text{SF}_4</math>                      C. <math>\text{OF}_2</math> B. <math>\text{BCl}_3</math>                      D. <math>\text{SnCl}_2</math></p>	<p>A B C D</p>
8	<p>What element can form an incomplete octet?</p> <p>A. Boron                      C. Bismuth B. Bromine                      D. Barium</p>	<p>A B C D</p>



9	<p>The electronic configuration of elements X and Y are as follows:</p> <p>X: <math>1s^2 2s^2 2p^1</math></p> <p>Y: <math>1s^2 2s^2 2p^6 3s^2 3p^5</math></p> <p>When X and Y combine, the most plausible formula and bonding are</p> <table><thead><tr><th></th><th>FORMULA</th><th>BONDING</th></tr></thead><tbody><tr><td>A.</td><td><math>XY_3</math></td><td>covalent</td></tr><tr><td>B.</td><td><math>X_2Y</math></td><td>covalent</td></tr><tr><td>C.</td><td><math>XY_2</math></td><td>ionic</td></tr><tr><td>D.</td><td><math>X_2Y_3</math></td><td>ionic</td></tr></tbody></table>		FORMULA	BONDING	A.	$XY_3$	covalent	B.	$X_2Y$	covalent	C.	$XY_2$	ionic	D.	$X_2Y_3$	ionic	A B C D
	FORMULA	BONDING															
A.	$XY_3$	covalent															
B.	$X_2Y$	covalent															
C.	$XY_2$	ionic															
D.	$X_2Y_3$	ionic															
10	<p>What is the unusual feature about this compound?</p> <div style="text-align: center;"><math display="block">\begin{array}{c} \text{Br} \\   \\ \text{Br} - \text{Xe} : - \text{Br} \\   \\ \text{Br} \end{array}</math></div> <p>A. Obey the octet rule</p> <p>B. Odd number electron</p> <p>C. Incomplete octet</p> <p>D. Expanded octet</p>	A B C D															
11	<p>The ion has no valence electron in its Lewis symbol is (C1&amp;C2)</p> <table><tbody><tr><td>A.</td><td><math>B^{3+}</math></td><td>C.</td><td><math>Si^+</math></td></tr><tr><td>B.</td><td><math>O^{2-}</math></td><td>D.</td><td><math>Cl^-</math></td></tr></tbody></table>	A.	$B^{3+}$	C.	$Si^+$	B.	$O^{2-}$	D.	$Cl^-$	A B C D							
A.	$B^{3+}$	C.	$Si^+$														
B.	$O^{2-}$	D.	$Cl^-$														



12	<p>Lewis structure of <math>\text{SOCl}_2</math> is given as follows (C1&amp;C2)</p> <div><math display="block">\begin{array}{c} \text{:}\ddot{\text{O}}\text{:} \\ \parallel \\ \text{:}\ddot{\text{Cl}}-\text{S}-\ddot{\text{Cl}}\text{:} \\ \text{:}\ddot{\text{Cl}}\text{:} \end{array}</math></div> <p>The formal charges on sulphur, chlorine and oxygen are</p> <table><thead><tr><th></th><th>Sulphur</th><th>Chlorine</th><th>Oxygen</th></tr></thead><tbody><tr><td>A.</td><td>0</td><td>0</td><td>0</td></tr><tr><td>B.</td><td>-1</td><td>+2</td><td>-1</td></tr><tr><td>C.</td><td>+2</td><td>-1</td><td>-1</td></tr><tr><td>D.</td><td>+2</td><td>-2</td><td>0</td></tr></tbody></table>		Sulphur	Chlorine	Oxygen	A.	0	0	0	B.	-1	+2	-1	C.	+2	-1	-1	D.	+2	-2	0	A B C D
	Sulphur	Chlorine	Oxygen																			
A.	0	0	0																			
B.	-1	+2	-1																			
C.	+2	-1	-1																			
D.	+2	-2	0																			
13	<p>Which of the following is NOT the case of exceptional to octet rule:</p> <p>A. <math>\text{OF}_2</math> B. <math>\text{ClO}_2^+</math> C. <math>\text{SnCl}_2</math> D. <math>\text{BeCl}_2</math></p>	A B C D																				

