

Unit 4 Practice Quiz

Part I: Write the correct names of the followings:



Part II: Write the correct chemical formula for the following:

5. sodium carbonate

8. magnesium chloride

6. dinitrogen monoxide

9. stannous hydrogen sulfate

7. biphosphate

10. zinc hydroxide

Part III: Lewis structures:

Molecule	Lewis Structure	Molecule	Lewis Structure
11. SO_3^{2-}		13. C_2Br_2	
12. FCN		14. PO_3^-	

15. List which of the above compounds, if any, would have resonance structures:

16. Which of the above compounds have the following:

a. exactly 2 sigma bonds _____

b. exactly 2 pi bonds _____

17. Calculate the bond energy associated with CO_2 .

Bond Dissociation Energies at 298 K			
Bond	kJ/mol	Bond	kJ/mol
$\text{Cl}-\text{Cl}$	242	$\text{N}\equiv\text{N}$	945
$\text{C}-\text{C}$	345	$\text{O}-\text{H}$	467
$\text{C}-\text{H}$	416	$\text{C}-\text{O}$	358
$\text{C}-\text{N}$	305	$\text{C}=\text{O}$	745
$\text{H}-\text{I}$	299	$\text{O}=\text{O}$	498
$\text{H}-\text{N}$	391		