Dougherty Valley HS Chemistry
Bonding and Structure – Mixed Practice

Worksheet #9

Name: **Period:** **Seat#:**

Answer the following questions:

1) What are the three types of bonds and how are their electron positions different?	**2)** Why do you need to use prefixes for naming covalent bonds and not for naming ionic bonds?
3) Why does carbon dioxide have two double bonds?	**4)** Why can some elements have more than 8 electrons in their valance shell and what do we call it when they do?
5) List the Roman numerals from 1 to 10.	

Complete the following table:

Formula	Type of Bond	Name
6) **Na_2SO_4**		
7) **SiO_2**		
8)		**Lead (II) nitrite**
9)		**Chromium (III) oxide**
10) **HgO**		
11)		**Iron (II) phosphate**
12)		**Hexaboron silicide**
13) **SCl_4**		
14) **P_4S_5**		
15) **$NaHCO_3$**		

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Draw the Lewis Structure for the following molecules:

Molecule	Lewis Structure	Description		Molecule	Lewis Structure	Description	
16) SF_6		# of Single Bonds	# of Double Bonds	17) Sulfate ion		# of Single Bonds	# of Double Bonds
# Valence electrons		# of Triple Bonds	# of Lone Pairs	# Valence electrons		# of Triple Bonds	# of Lone Pairs
18) CH_3OH		# of Single Bonds	# of Double Bonds	19) $BFCl_2$		# of Single Bonds	# of Double Bonds
# Valence electrons		# of Triple Bonds	# of Lone Pairs	# Valence electrons		# of Triple Bonds	# of Lone Pairs
20) O_3		# of Single Bonds	# of Double Bonds	21) BeH_2		# of Single Bonds	# of Double Bonds
# Valence electrons		# of Triple Bonds	# of Lone Pairs	# Valence electrons		# of Triple Bonds	# of Lone Pairs
22) SiI_4		# of Single Bonds	# of Double Bonds	23) K_2SO_3		# of Single Bonds	# of Double Bonds
# Valence electrons		# of Triple Bonds	# of Lone Pairs	# Valence electrons		# of Triple Bonds	# of Lone Pairs
24) $Fe_3(PO_4)_2$		# of Single Bonds	# of Double Bonds	25) NaOH		# of Single Bonds	# of Double Bonds
# Valence electrons		# of Triple Bonds	# of Lone Pairs	# Valence electrons		# of Triple Bonds	# of Lone Pairs