

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 valence shell and what do we call it when they do?
5) List the Roman numerals from 1 to 10.	

Complete the following table:

Name	Type of Bond	Formula
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		

Dougherty Valley HS Chemistry
 Bonding and Structure – Review Naming, Neutral Compounds,
 and Lewis Dot Structures

Draw the Lewis Structure for the following molecules:

Molecule	Lewis Structure	Description		Molecule	Lewis Structure	Description	
		# of Single Bonds	# of Double Bonds			# of Single Bonds	# of Double Bonds
16) SF₆				17) Sulfate ion			
# Valence electrons		# of Triple Bonds	# of Lone Pairs	# Valence electrons		# of Triple Bonds	# of Lone Pairs
18) CH₃OH		# of Single Bonds	# of Double Bonds	19) BFCI₂		# 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 ₂ SO ₃		# of Single Bonds	# of Double Bonds
# Valence electrons		# of Triple Bonds	# of Lone Pairs	# Valence electrons		# of Triple Bonds	# of Lone Pairs
24) Fe₃(PO₄)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