1-15
1-18
1-13

+Name			

Period		

Test Review – Unit 8 – Molecular Geometry

1.	What are the 10 greek prefixes used when naming covalent compound?
2.	What is the phrase or name to help you remember the 7 diatomic molecules? List the 7 diatomic molecules.
3.	What is the phrase to believe your sense here the first to reside a sense of the se
5.	What is the phrase to help you remember the five transition metals with 2 ⁺ and 3 ⁺ charge? List these 10 ions.
4.	What is the phrase to help you remember the two transition metals with 2 ⁺ and 4 ⁺ charge? List these 4 ions.
	and determine the draw of the resignal street, there is no many of the first the street of the first of the street
5.	What is the phrase to help you remember the two transition metals with 1 ⁺ and 2 ⁺ charge? List these 4 ions.
	d A control to addicated painting testing
6.	Which three transition metals have a fixed charge? (List these 3 ions and their charge.)
1	Triple division bond
7.	Why does atomic size increase when going down a column on the periodic table?
	se of notes at the second control of the control of
8.	Why does atomic radius decrease when going across a period on a periodic table?
	is, sive an example of a compound where the central atom exceeds the octet rule. Movern and engine in
1-198	This electron electron for HCE is:
9.	Rank by size, largest to smallest, C, C ⁴⁺ and C ⁴⁻ .
10.	Why does electronegativity increase as you move across a period on a periodic table?
	aux trefine possitive their me dot diagram for an ionic compound, polar covalent compound and non-polar cova
	compound, Indicate whether each is polar or non-polar, tabel the dipoles if they exist.
11.	Why does electronegativity decrease as you move down a column on a periodic table?
	, and a periodic table?

12. Why does ionization energy increase as you move across a period on a periodic table?
13. Why does ionization energy decrease as you move down a column on a periodic table?
14. Explain the difference between and ionic compound and covalent compound. Give the difference between at least 3 physical properties of each.
reast 5 physical properties of each.
15. What does VSEPR stand for? Explain the VSEPR theory. Give an example of a compound where this plays out
and determines the shape of the molecule.
a. Non-resources
4 - How-handing pay of electrons
16. How are an ionic bond and a covalent bond different?
17. Explain the octet rule. Give an example of a covalent compound and discuss the octet rule in relation to each
atom.
a. Mail
18. Give an example of a compound where the central atom exceeds the octet rule. Draw the dot diagram for this
molecule.
3 Barricky at largest to squallest C. C. and C.
19. Define a pi bond. Define a sigma bond. Which of these is the weaker bond.
The second secon
20. Define polarity. Draw the dot diagram for an ionic compound, polar covalent compound and non-polar covalent
compound. Indicate whether each is polar or non-polar. Label the dipoles if they exist.
The same resecutions agrees up as your passes down a column on a personness sales and an experience
The state of the s

- 21. Define resonance. Give an example of a compound with a resonance structure and draw the dot diagrams.
- 22. A certain molecule has a bent shape. Is the molecule SO₂ or SH₂? Explain in terms of the VSEPR theory and draw the Lewis structures for SO₂ and SH₂.

Matching	
Term	Definition
23. Non-polar covalent compound	 A covalent bond in which only one pair of electrons is shared by two bonded atoms.
24. Double covalent bond	 A covalent bond between two atoms of different electronegativity's in which the bonding electrons are not shared equally.
25. Single covalent bond	 A covalent bond formed by the equal sharing of bonding electrons by two atoms.
26. Polar bond	 d. A covalent bond involving two pairs or electrons; each atom donates one pair of electrons to the bond.
27. Triple covalent bond	e. A covalent bond in which three pairs of electrons are shared by the two bonded atoms.

Multiple Choice

- 28. A bond in which each atom contributes two electrons is:
 - a. A double covalent bond
 - b. An ionic bond
 - c. A polar covalent bond
 - d. A coordinate covalent bond
- 29. The electron dot structure for HCl is:

30.	You would expect a bond formed between a silicon atom and an oxygen a	atom to be:
	a. An ionic bond	to be.
1	b. A coordinate covalent bond	
(c. A polar covalent bond	
(d. A non-polar covalent bond	
100	27 Y 15 SEX ASSESS TO THE SECOND PROPERTY OF SECOND	
	Which one of the following compounds is NOT covalent?	or and earth of the courses for a
	a. SCl ₂	
	b. KCl	
	c. HCI	
	d. S ₂ Cl ₂	
	A diatomic molecule with a triple covalent bond is:	
	a. N ₂	
	o. Br ₂	
	a. A cavalent hand m which only one pair of electron	
d	d. O ₂	
22 4	b. A covalent balist alendary line and long and	
33. A	A molecule of nitrous oxide, N ₂ O contains all of the following except:	ende Jasissou soulou ava
a	. Ton resonance	
b	AT THE PERSON AND THE BELLEVE WAS NOT BELLEVE WHEN IN THE PERSON AND A PROPERTY OF THE PERSON AND THE PERSON AN	
C.	amora dia salah sa	
d	I. Non-bonding pair of electrons	
34. If	a bonding pair of electrons is unequally shared between two atoms, the	
a.	. ionic	bond is:
b.	· Water the second seco	
c.	. coordinate covalent	
d.	. polar covalent	Autriple Choice
35 M	/high of the following a second 1: NOT is a 2	nice more three databases above easing
33. vv	/hich of the following compounds is NOT ionic? Nal	unde majevas siduojes
	. CaCl ₂	Dillos Julio de
c.		hand make to make about A
	Na ₂ O	Brief How All Hay ID DOZA
u.	11420	the Marine tolerand the second
36. A	covalent bond forms:	. 100
a.	When an element becomes a noble gas.	
b.	When atoms share electrons.	
C.	Between metals and nonmetals.	
d.	When electrons are transferred from one atom to another.	ilQ i li
37. W	hich of these compounds would NOT have covalent bonds?	
a.		
	K₂O	in the second
c.		- W-1
	H_2O_2	
38. A r	molecule with a single covalent bond is:	PA + 14
	CO ₂	ы - 11 - Б
b.	F ₂	
c.	NO ⁻¹	
d.	N_2	