CST Review Name_____
Topic 2- Chemical Bonds Date_____ Per_____

1. Compare and contrast ionic and molecular (covalent) bonds. How are each formed?
2. Compare and contrast ionic and molecular (covalent) compounds.
3. What type of bonds are present in NaCl?
4. Describe how the atoms and molecules in a liquid move in comparison with those in a solid. Which has the stronger bonds?
5. Write the formula of the following compounds. What type of compound is each of the following? What type of bond would each have?

	Formula	**Bond Type**
a) calcium phosphate		
b) copper (II) sulfate		
c) boron trichloride		
d) zinc (II) sulfate		
e) dinitrogen trioxide		
f) trisilicon tetranitride		
g) iron (III) nitride		
h) magnesium hydroxide		
i) dichlorine heptoxide		
j) barium cyanide		
k) methane (carbon tetrahydride)		
l) nitrogen gas		

6. Name the following compounds. What type of compound is each of the following? What type of bond would each have?

	Name	**Bond Type**
a) Cl_2O		
b) $SrSO_4$		
c) NH_3		
d) SnO_2		
e) N_2H_4		
f) K_2CO_3		
g) ZnO		
h) PI_3		
i) Cl_2O_7		
j) $Fe_2(SO_4)_3$		
k) NH_4Cl		
l) Cl_2		

7. Draw Lewis dot structures for the following molecular compounds.

a) ammonia
b) water
c) carbon dioxide
d) boron trifluoride
e) silicon tetrabromide
f) phosphorus trihydride
g) silicon dioxide
h) difluorine monosulfide