

Name _____

Honors Chemistry

Draw the **Lewis Dot** structure, **name** of the compound, give the **shape** of the following molecules, and give their **bond angles**. Don't forget ionic compounds follow different naming rules than covalent. For shape and bond angle of all ionic compounds write "Ionic", unless there is a polyatomic ion. If there is a polyatomic ion give the shape and bond angle of the polyatomic ion.

1. $\text{Sr}(\text{OH})_2$ (shape of hydroxide)

Name _____

Shape _____

Bond angle _____

3. SiPCl_5 (two different shapes)

Name _____

Shape _____

Bond angle _____

2. MgCl_2

Name _____

Shape _____

Bond angle _____

4. C_2F_6 (two of the same shape)

Name _____

Shape _____

Bond angle _____

5. CH₂O

Name _____

Shape _____

Bond angle _____

8. Na₂S

Name _____

Shape _____

Bond angle _____

6. SF₄ (S breaks the octet rule)

Name _____

Shape _____

Bond angle _____

9. AlH₃

Name _____

Shape _____

Bond angle _____

7. SeF₆ (Se breaks the octet rule)

Name _____

Shape _____

Bond angle _____

10. NI₃

Name _____

Shape _____

Bond angle _____

11. C_3H_8 (three of the same)

Name _____

Shape _____

Bond angle _____

13. $NaCH_3COO$ (2 shapes in acetate)

Name _____

Shape _____

Bond angle _____

12. $Fe(NO_2)_2$ (shape of nitrite) don't
forget roman numeral

Name _____

Shape _____

Bond angle _____

14. NH_4Cl (shape of ammonium)

Name _____

Shape _____

Bond angle _____

15. XeF₄ (Xe breaks the octet rule)

Name _____

Shape _____

Bond angle _____

17. ClF₃ (Cl breaks the octet rule)

Name _____

Shape _____

Bond angle _____

16. C₄H₁₀ (4 of the same shape)

Name _____

Shape _____

Bond angle _____

18. Ti(OH)₃ (don't forget roman numeral)

Name _____

Shape _____

Bond angle _____