

Instructions for Completing Retest Assignment

1. You have been given the correct answers; however, you should go through and answer the questions as though you do not in order to see which items you need help with during tutoring.
2. You must write 1-2 sentences per question explaining why the answer is what it is. This must be done on your own paper.
3. You should come to tutoring to ask questions about any of the questions you do not understand. Attending tutoring is not required, but strongly encouraged.
4. This assignment is due on the day of the retest and must be completed before you will be allowed to take the retest.
5. Retest date is _____ in room _____ from 2:30-3:30pm.

Questions I have and need to ask about:

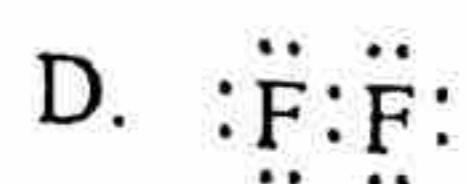
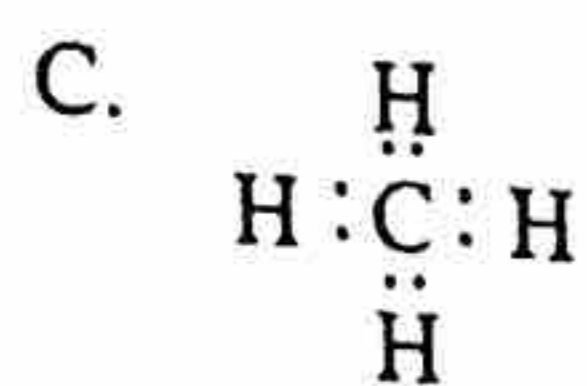
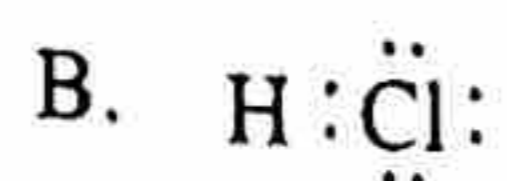
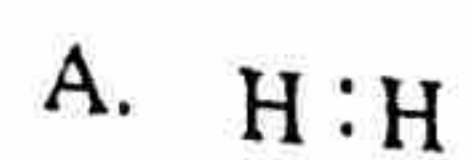
Bonding Retest Assignment

Name: _____

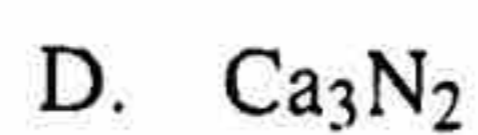
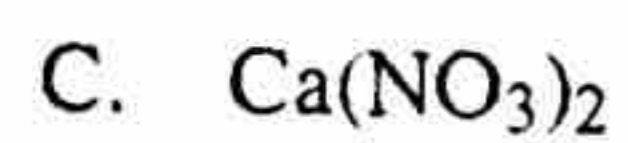
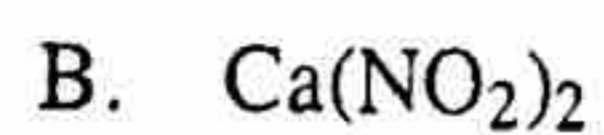
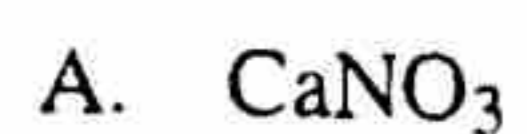
Date: _____

- Which is the formula for magnesium sulfide?
 - MgS
 - MgSO₃
 - MnS
 - MnSO₃
- Based on the VSEPR theory, what is the molecular geometry of a molecule of PI₃?
 - linear
 - tetrahedral
 - trigonal planar
 - trigonal pyramidal
- Which formula is correctly paired with its name?
 - MgCl₂—magnesium chlorine
 - K₂O—phosphorus dioxide
 - CuCl₂—copper (II) chloride
 - FeO—iron (III) oxide
- What is the correct name for the compound with the formula CrPO₄?
 - chromium (II) phosphate
 - chromium (III) phosphate
 - chromium (II) phosphide
 - chromium (III) phosphide
- Which of the following is the formula for ammonium hydroxide?
 - Al₂O₃
 - AmO₂
 - NH₃OH
 - NH₄OH
- Which is the formula for sodium perchlorate?
 - NaClO
 - NaClO₂
 - NaClO₃
 - NaClO₄

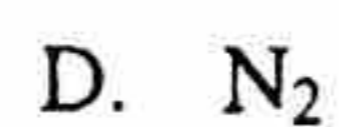
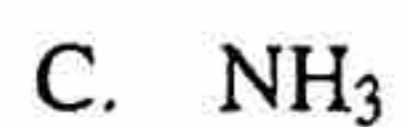
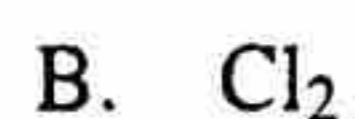
7. Which electron dot formula represents a polar molecule?



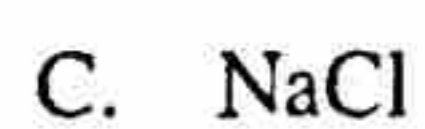
8. What is the chemical formula for calcium nitrate?



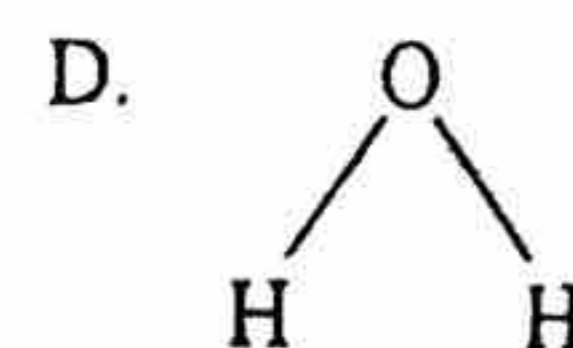
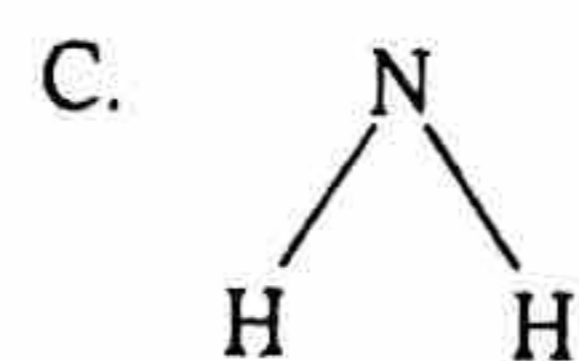
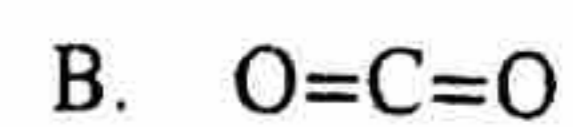
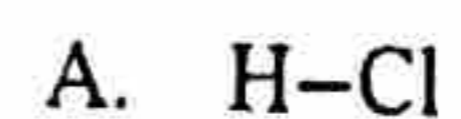
9. Which formula represents a polar molecule?



10. Which of the following is a covalent compound?



11. Which molecule is nonpolar?



12. What is the correct IUPAC name for the compound NH_4Cl ?

A. nitrogen chloride

B. nitrogen chlorate

C. ammonium chloride

D. ammonium chlorate

13. Covalent bonds are formed when electrons are

A. transferred from one atom to another

B. captured by the nucleus

C. mobile within a metal

D. shared between two atoms

14. What is the correct name of the compound with the formula NH_4NO_2 ?

- A. ammonia nitrite B. ammonium nitrite
C. ammonia nitrate D. ammonium nitrate

15. Which substance is a good conductor of electricity in both the solid and liquid phases?

- A. a metallic substance
B. an ionic substance
C. a network substance
D. a molecular substance

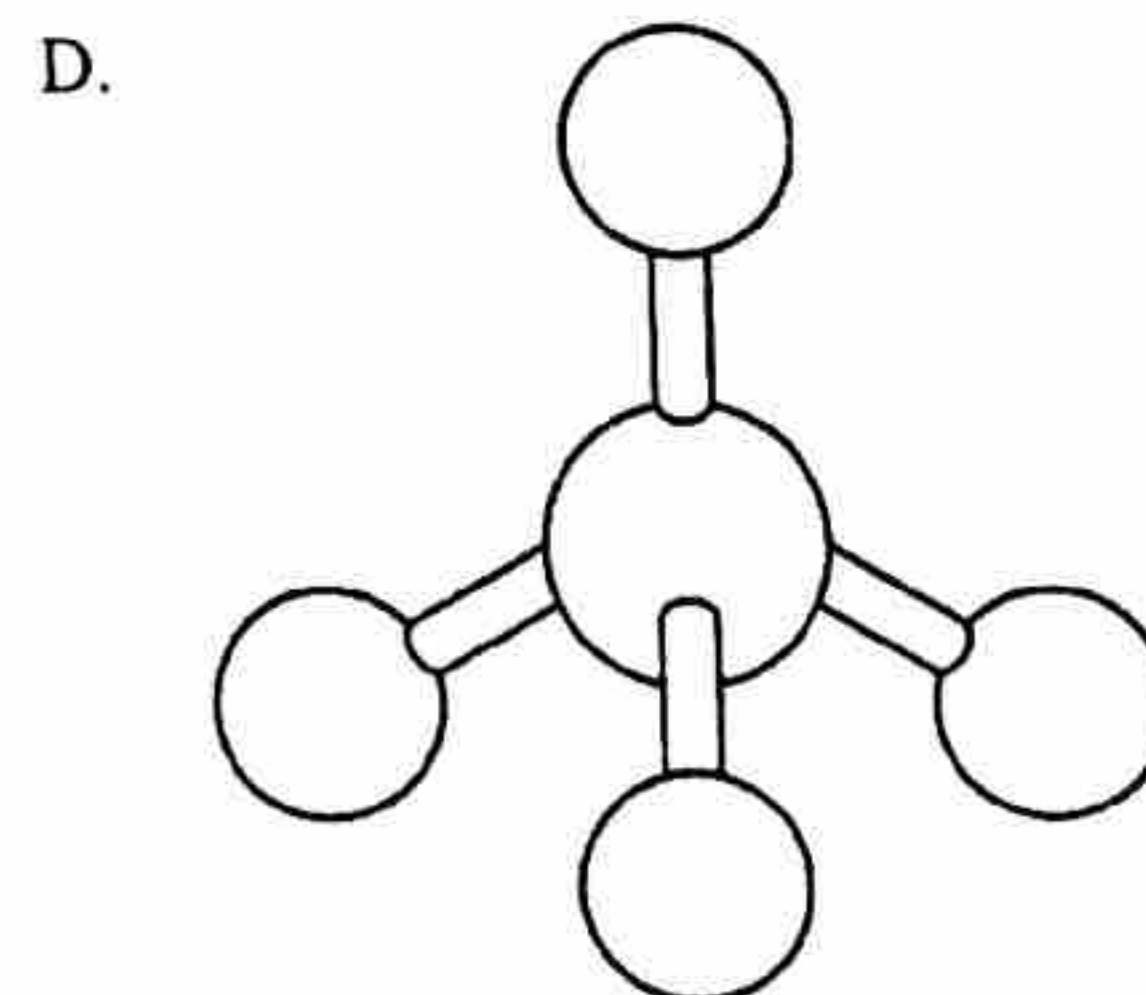
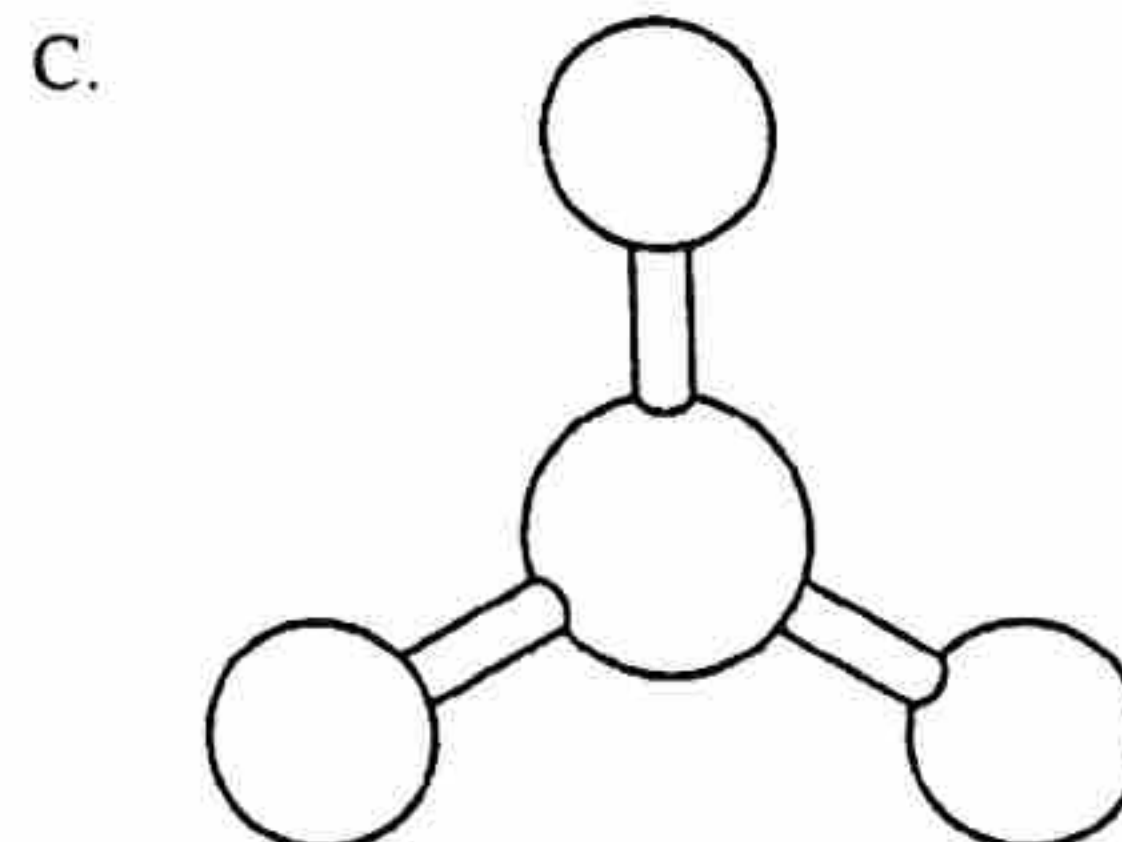
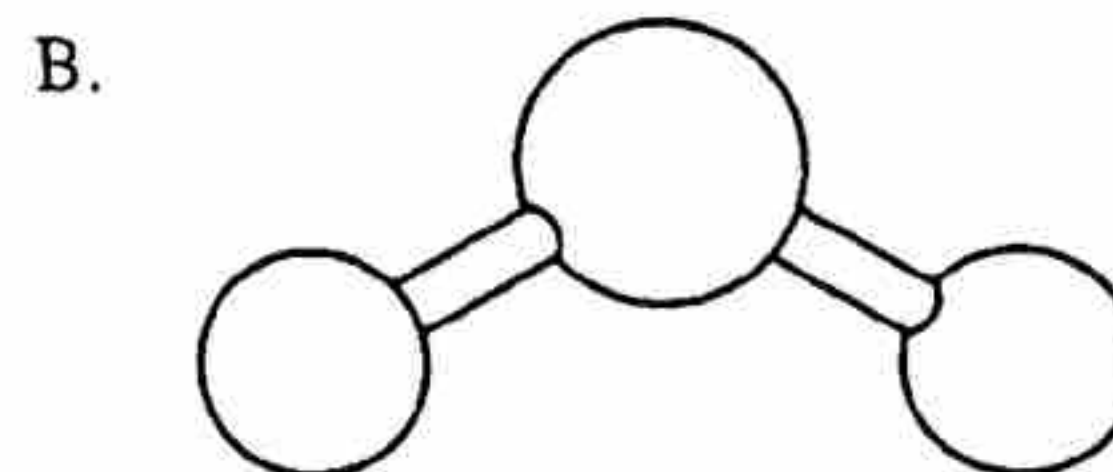
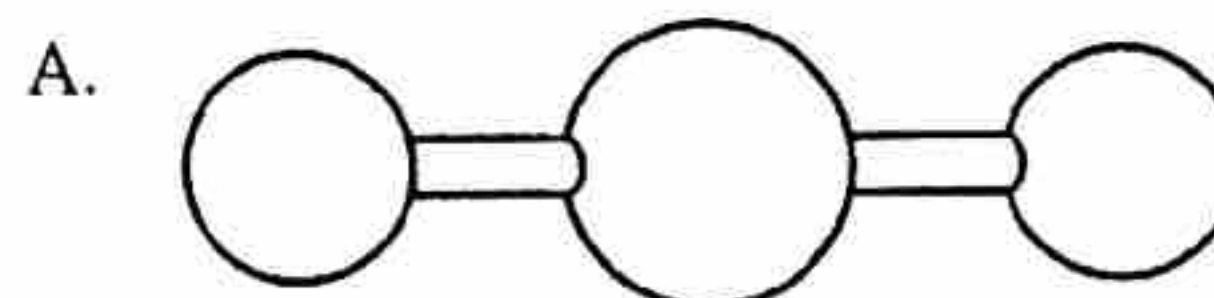
16. What is the name of the compound with the chemical formula CrCl_3 ?

- A. chromium tetrachloride
B. chromium trichloride
C. chromium(II) chloride
D. chromium(III) chloride

17. What is the shape of a molecule which has two shared pairs of electrons and no unshared pairs?

- A. tetrahedral B. bent
C. trigonal planar D. linear

18. Which of the following models *best* represents the shape of a compound with trigonal planar geometry?



19. Which formula represents an ionic compound?

- A. $\text{H}_2\text{O}(\ell)$ B. $\text{NaCl}(\text{s})$
C. $\text{NH}_3(\text{g})$ D. $\text{CCl}_4(\ell)$

20. Which formula correctly represents the compound calcium hydroxide?

- A. CaOH B. Ca_2OH
C. CaOH_2 D. $\text{Ca}(\text{OH})_2$

21. Which formula correctly represents iron (III) oxide?

- A. Fe_2O_3 B. Fe_3O_2 C. FeO_3 D. Fe_3O

22. The correct formula for sodium oxide is

- A. SO_2 B. S_2O C. NaO_2 D. Na_2O

23. The correct name of the compound with the formula PbO_2 is

- A. lead (I) oxide B. lead (II) oxide
C. lead (III) oxide D. lead (IV) oxide

24. Which substance contains bonds that involved the transfer of electrons from one atom to another?

- A. CO_2 B. NH_3 C. KBr D. Cl_2

25. Which molecule contains a triple covalent bond?

- A. H_2 B. N_2 C. O_2 D. Cl_2

26. Which is the correct formula for dinitrogen pentoxide?

- A. N_4O B. NO_2 C. N_2O_5 D. NO_4

27. What compound has the chemical formula MgI_2 ?

- A. di-iodide magnesium
- B. iodide(II) magnesium
- C. magnesium iodide
- D. magnesium(I) iodine(II)

28. A crystalline solid has a high melting point and is a good conductor of electricity in the liquid state. This solid could be

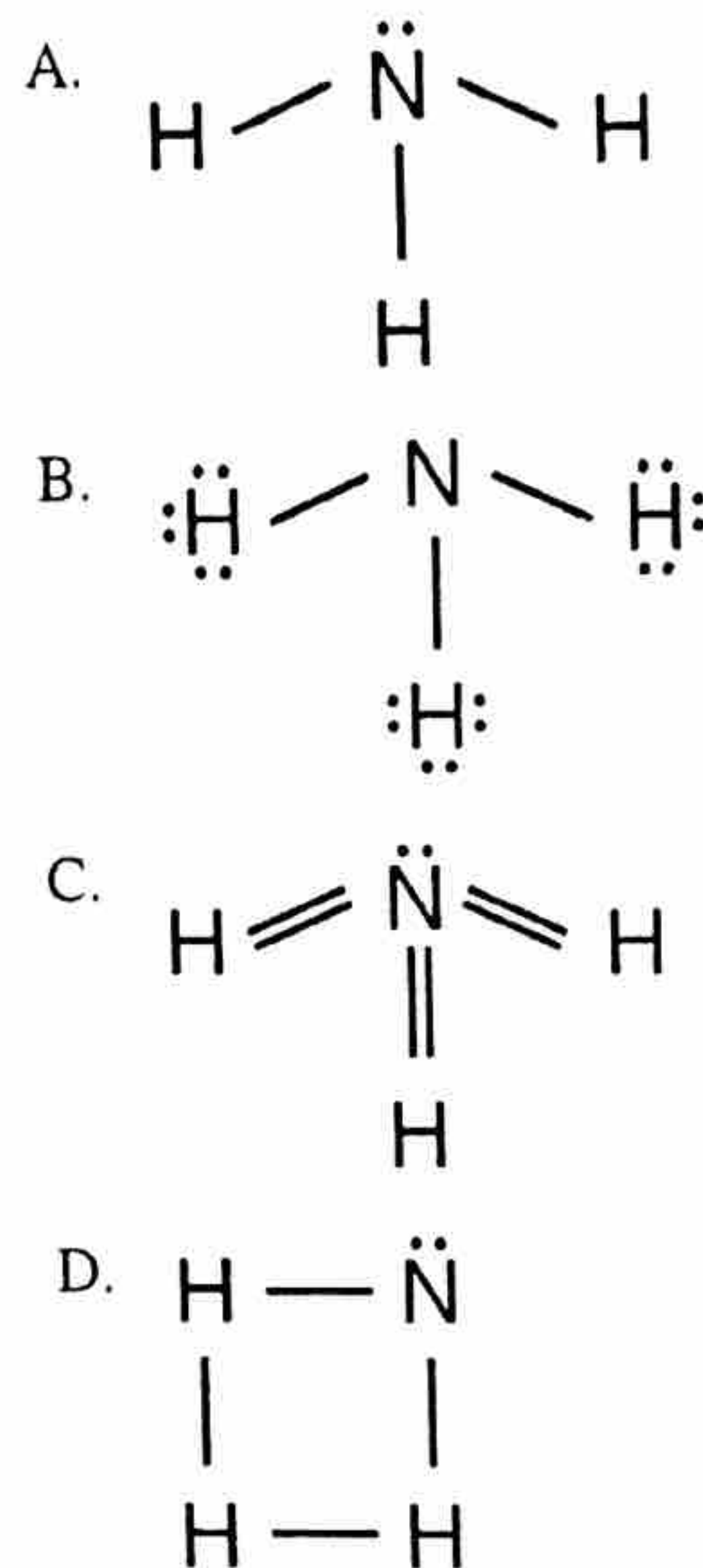
- A. CO_2
- B. Hg
- C. $C_6H_{12}O_6$
- D. KCl

29. What type of bonding is associated with compounds that have the following characteristics:

- high melting points
- conduct electricity in the molten state
- solutions conduct electricity
- normally crystalline solids at room temperature.

- A. covalent
- B. ionic
- C. hydrogen
- D. metallic

30. The chemical formula for ammonia is NH_3 . Which of the following is the correct Lewis electron dot structure for ammonia?



31. The correct name for an aqueous solution of HCl is

- A. chloric acid.
- B. chlorous acid.
- C. hydrochloric acid.
- D. hydrogen chloride.

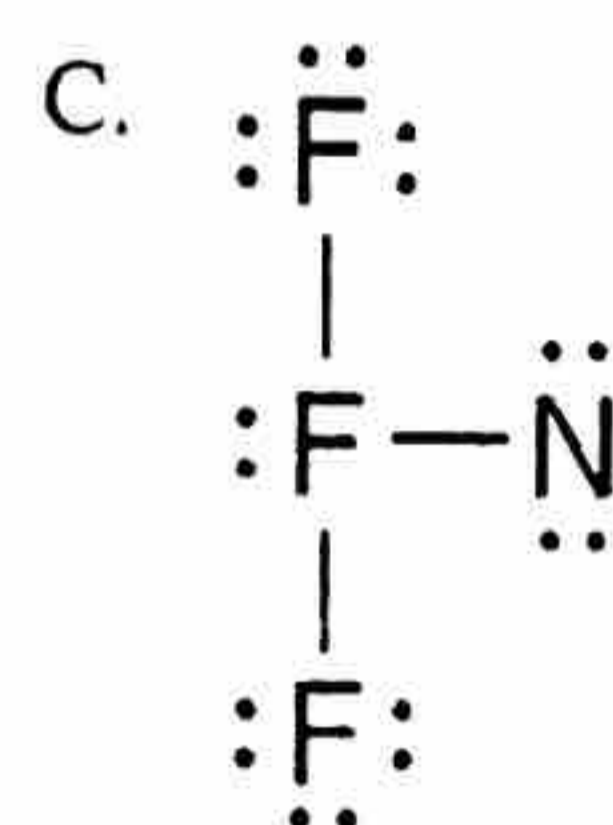
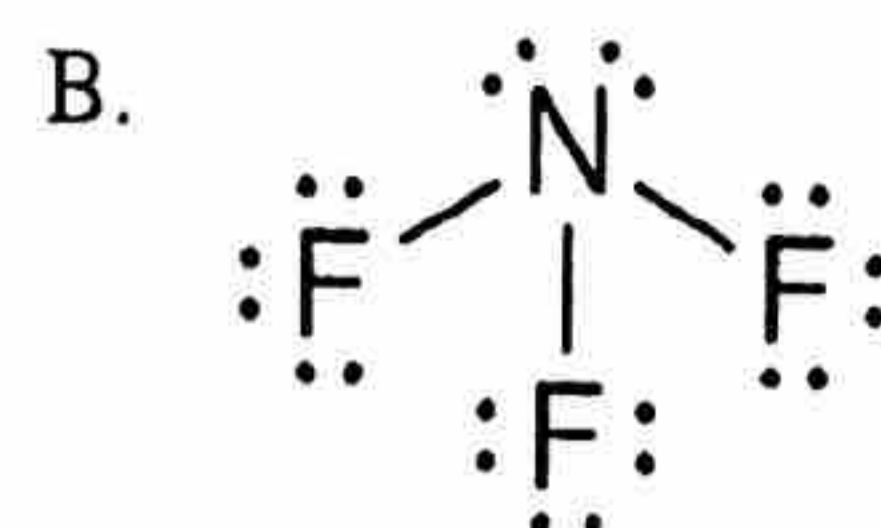
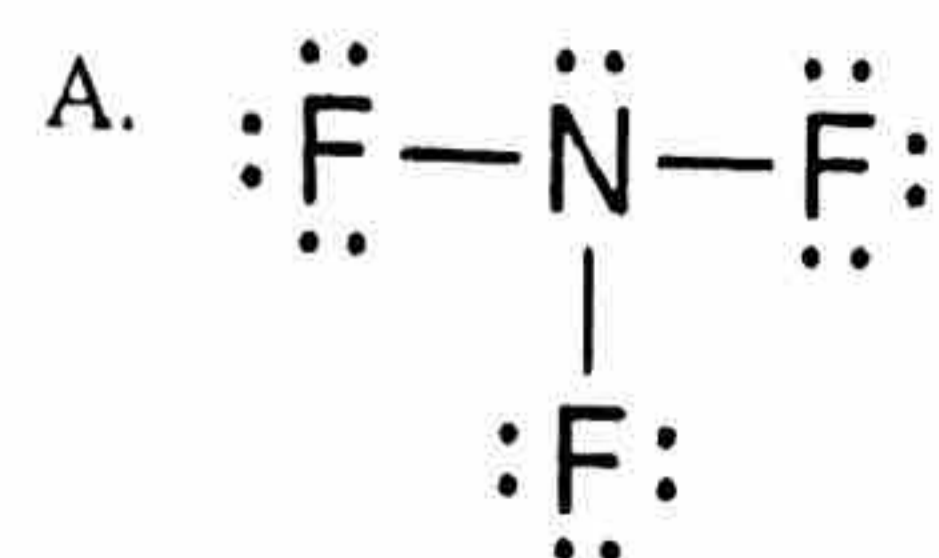
32. Which pair of elements would *most likely* bond to form a covalently bonded compound?

- A. sodium and fluorine
- B. barium and chlorine
- C. phosphorus and oxygen
- D. magnesium and sulfur

33. Based on the VSEPR theory, what is the molecular geometry of CO_2 ?

- A. linear
- B. tetrahedral
- C. trigonal planar
- D. trigonal pyramidal

34. What is the Lewis dot structure for nitrogen trifluoride (NF_3)?



35. What is the name of the compound whose formula is H_2SO_4 ?

- A. hydrosulphuric acid
- B. hydrosulfurous acid
- C. sulfuric acid
- D. sulfurous acid

Bonding Retest Assignment 3/7/2018

1.
Answer: A
2.
Answer: D
3.
Answer: C
4.
Answer: B
5.
Answer: D
6.
Answer: D
7.
Answer: B
8.
Answer:
9.
Answer: C
10.
Answer: A
11.
Answer: B
12.
Answer: C
13.
Answer: D
14.
Answer: B
15.
Answer: A
16.
Answer: D
17.
Answer: D
18.
Answer: C
19.
Answer: B
20.
Answer: D

21.
Answer: A
22.
Answer: D
23.
Answer: D
24.
Answer: C
25.
Answer: B
26.
Answer: C
27.
Answer: C
28.
Answer: D
29.
Answer: B
30.
Answer: A
31.
Answer:
32.
Answer: C
33.
Answer: A
34.
Answer: A
35.
Answer: C