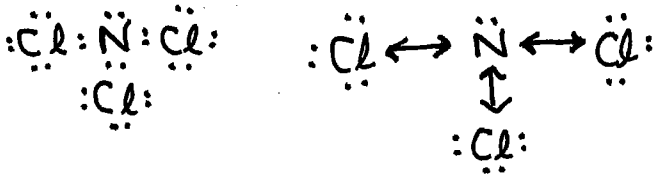
# Bonding Unit Practice Test

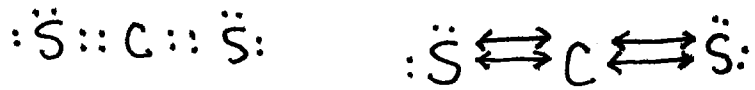
1. a) ionic b) ionic c) polar covalent d) ionic e) covalent

2. a) $NCl_3$



b) $Na_2O$

c) $CS_2$



d) CaS

3. a. ~~polar~~ non-polar b. polar c. polar

d. non-polar e. polar

4. a. copper (II) sulphide b. calcium hydroxide c. aluminum oxide
d. ammonium hydroxide e. potassium dichromate f. chromium (II) carbonate
g. cobalt (II) phosphate h. gallium hydride i. nickel (III) nitrate
j. osmium (VIII) sulphide k. tin (IV) oxalate l: silver sulphate
m. rhodium (II) phosphate

5. a. boron pentachloride b. disulphur dichloride c. carbon monoxide. d. nitrogen tri iodide e. triphosphorus pentoxide
f. carbon disulphide g. carbon tetrafluoride. h. dicarbon hexachloride
~~hexa fluoride~~ i. dihydrogen monoxide
j. dihydrogen monoselenide k. trinitrogen trichloride

6. a. sulphuric acid b. hydroxic acid c. nitric acid
d. perchloric acid e. acetic (or ethanoic) acid f. carbonic acid
g. chlorous acid h. nitrous acid i) hydroselenic acid
j. hydrobromic acid

7. a. cesium hydroxide trihydrate b. vanadium (V) oxide decahydrate
c. barium chloride nonahydrate d. tin (IV) carbonate pentahydrate
e. aluminum sulphate heptahydrate f. zinc acetate monohydrate
g. cobalt (II) nitride tetrahydrate

8 a. $Fe_2(C_2O_4)_3$ b. $H_2SO_3$ c. $Ga_2(SO_4)_3$ d. $P_3I_4$
e. $Co_2O_3$ f. $Mg(OH)_2$ g. $HClO_4$ h. $Co_2(SO_4)_3 \cdot 5H_2O$
i. $Tc_3(AsO_4)_2 \cdot 2H_2O$ j. $Sc_3BO_3$ k. $C_2Br_6$ l. $CH_4$
m. $MgSeO_4$ n. $LiSCN$ o. $Si_3F_8$