

KEY

Protons, Neutrons, and Electrons Practice Worksheet

Fill in the blanks in the following worksheet. Please keep in mind that the isotope represented by each space may NOT be the most common isotope or the one closest in atomic mass to the value on the periodic table.

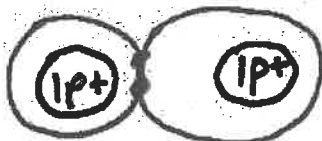
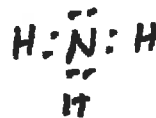
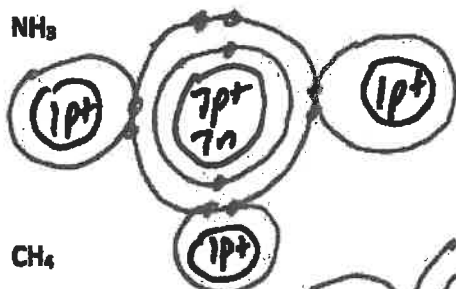
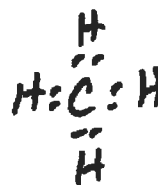
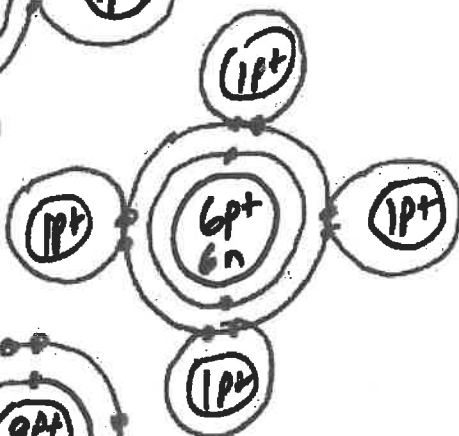
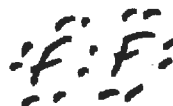
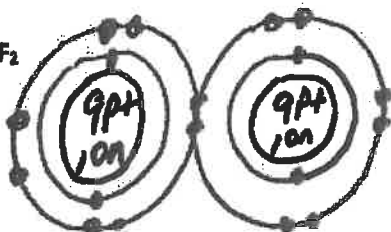
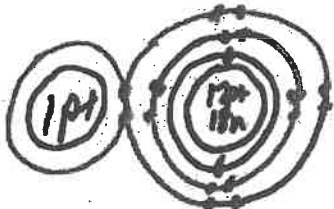
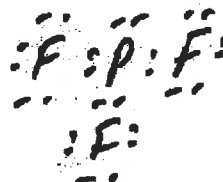
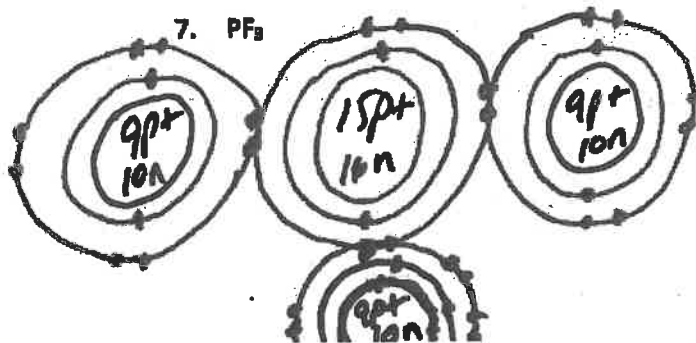
Atomic symbol	Atomic number	Protons	Neutrons	Electrons	Atomic mass
B	5	5	6	5	11
Na	11	11	13	11	24
Ga	31	31	37 ³⁹	31	70
Y	39	39	50	39	89
Cu	29	29	35	29	64
Tl	43	43	57	43	100
Pb	82	82	125	82	207
Yb	70	70	102	70	173
Ac	89	89	136	89	225
Mo	42	42	53 ⁵⁴	42	96
Tl	81	81	123	81	206 ²⁰⁴
Fm	100	100	159	100	259
No	102	102	159	102	261
Yb	70	70	102	70	172 ¹⁷³
Sg	106	106	159	106	265

Covalent Bonds/Ionic Bonds and Bohr/Lewis Dot Structures

Name: _____

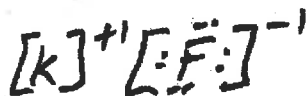
Date: _____

Draw the Bohr diagrams and Lewis Dot structures for the following molecules (covalent bonds).

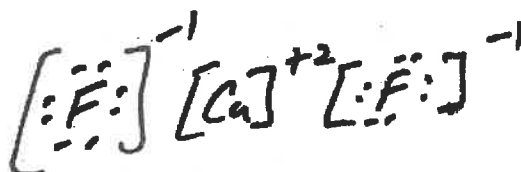
1. H_2 2. H_2O 3. NH_3 4. CH_4 5. F_2 6. HCl 7. PF_3 

Draw the Lewis dot diagrams for the following ionic compounds (i.e., metal/non-metal).

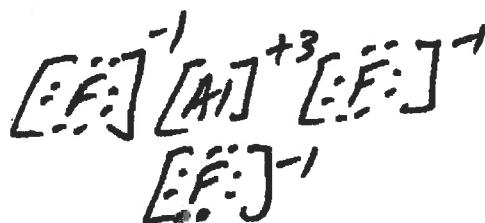
8. KF



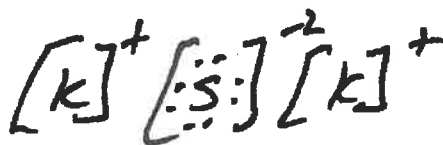
9. CaF₂



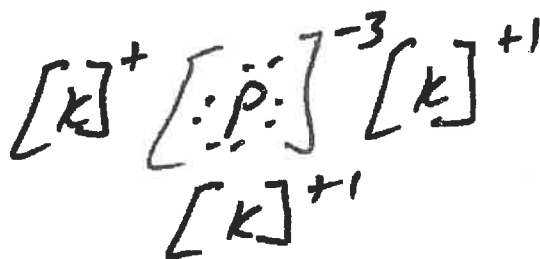
10. AlF₃



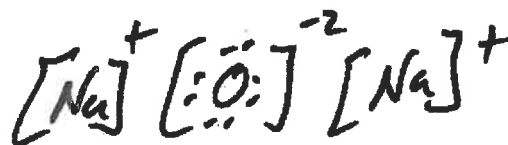
11. K₂S



12. K₃P



13. Na₂O



Use with textbook pages 186-196.

Chemical names and formulas of ionic compounds

1. Write the name for each of the following compounds.

- (a) BeS Beryllium sulfide
 (b) Hg_3N_2 Mercury (II) nitride
 (c) $\text{Cu}(\text{NO}_3)_2$ Copper (II) nitrate
 (d) Ag_2O Silver oxide
 (e) CoBr_2 Cobalt (II) bromide
 (f) $\text{Bi}_3(\text{PO}_4)_5$ Bismuth (III) phosphate
 (g) CaF_2 Calcium fluoride
 (h) Mn_2O_3 Manganese (III) oxide
 (i) $\text{Cr}_2(\text{SO}_4)_3$ Chromium (III) sulphate
 (j) ZnCl_2 Zinc chloride

- (k) $\text{Ni}(\text{OH})_2$ Nickel (II) hydroxide
 (l) $\text{K}_2\text{Cr}_2\text{O}_7$ Potassium dichromate
 (m) ScF_3 Scandium fluoride
 (n) NaI Sodium iodide
 (o) $\text{Pb}(\text{CO}_3)_2$ Lead (II) carbonate
 (p) RbClO_2 Rubidium chlorite
 (q) K_3P Potassium phosphide
 (r) $\text{Mg}(\text{CN})_2$ Magnesium cyanide
 (s) SnS Tin (II) sulfide
 (t) NaHCO_3 Sodium hydrogen carbonate
 (u) Sodium bicarbonate

2. Write the chemical formula for each of the following compounds.

- (a) aluminum bromide AlBr_3
 (b) platinum(II) sulphide PtS
 (c) strontium sulfite SrSO_3
 (d) scandium oxide Sc_2O_3
 (e) titanium(IV) nitride $\text{Ti}(\text{NO}_2)_4$
 (f) ammonium sulphate $(\text{NH}_4)_2\text{SO}_4$
 (g) lithium selenide Li_2Se
 (h) lead(II) hydrogen sulphate $\text{Pb}(\text{HSO}_4)_2$
 (i) sodium acetate NaCH_3COO
 (j) cesium chloride CsCl
 (k) cadmium(II) hydroxide $\text{Cd}(\text{OH})_2$
 (l) zinc phosphate $\text{Zn}_3(\text{PO}_4)_2$
 (m) barium chloride BaCl_2
 (n) tin(II) permanganate $\text{Sn}(\text{MnO}_4)_2$
 (o) lithium hypochlorite LiClO
 (p) gold(III) sulphate $\text{Au}_2(\text{SO}_4)_3$
 (q) sodium nitrate NaNO_2
 (r) chromium(III) chloride CrCl_3
 (s) potassium carbonate K_2CO_3
 (t) iron(III) bisulphate $\text{Fe}(\text{HSO}_4)_2$