Sept 17, 2019

Answers pg 195 #3-6/WS
Quiz

Feb 10-7:27 PM

pg 195 #3-6

3. (a) $Li^{1+}F^{1-}$ LiF (b) $Ca^{2+}Br^{1-}$ $CaBr_2$ (c) $Na^{1+}N^{3-}$ Na_3N d) $Al^{3+}N^{3-}$ AlN

4. lithium fluoride calcium bromide sodium nitride aluminum nitride

5. (a) $Na^{1+}I^{1-}$ NaI (b) $Be^{2+}F^{1-}$ BeF_2 c) $Mg^{2+}O^{2-}$ MgO d) $Al^{3+}S^{2-}$ Al_2S_3

6. (a) potassium chloride
   (b) sodium phosphide
   (c) calcium fluoride

Apr 30-5:03 PM

1. Lithium and bromine
Name: lithium bromide
Formula:
$Li^{1+}Br^{1-}$
LiBr

2. Strontium and oxygen
Name: strontium oxide
Formula:
$Sr^{2+}O^{2-}$
SrO

3. Calcium and fluorine
Name: calcium fluoride
Formula:
$Ca^{2+}F^{1-}$
CaF_2

4. Scandium and chlorine
Name: scandium chloride
Formula:
$Sc^{3+}Cl^{1-}$
$ScCl_3$

5. Sodium and sulphur
Name: sodium sulphide
Formula:
$Na^{1+}S^{2-}$
Na_2S

6. Gallium and oxygen
Name: gallium oxide
Formula:
$Ga^{3+}O^{2-}$
Ga_2O3

7. Potassium and bromine
Name: potassium bromide
Formula:
$K^{1+}Br^{1-}$
KBr

8. Cesium and arsenic
Name: cesium arsenide
Formula:
$Cs^{1+}As^{3-}$
Cs_3As

9. Beryllium and phosphorous
Name: beryllium phosphide
Formula:
$Be^{2+}P^{3-}$
Be_3P_2

10. Germanium and oxygen
Name: germanium oxide
Formula:
$Ge^{4+}O^{2-}$
Ge_2O_4
GeO_2

11. Aluminum and nitrogen
Name: aluminum nitride
Formula:
$Al^{3+}N^{3-}$
AlN

12. Barium and chlorine
Name: barium chloride
Formula:
$Ba^{2+}Cl^{1-}$
$BaCl_2$

13. Lithium and sulphur
Name: lithium sulphide
Formula:
$Li^{1+}S^{2-}$
Li_2S

14. Silver and phosphorous
Name: silver phosphide
Formula:
$Ag^{1+}P^{3-}$
Ag_3P

Mar 30-12:53 PM

pg 195 #7

Sep 17-1:34 PM

Ionic Compounds Quiz

I II III IV V

sodium oxide

magnesium oxide

magnese (II) oxide

Multi-Valent Ions

some metals have more than one charge they are called multi-valent ions

- these elements are found in the middle block of the periodic table i.e. Fe, Ni, Sn, Hg, Cu, Au etc (Table 2 p. 195)

When asked to write the formula the charge that is to be used is indicated in brackets with a Roman numeral

Ex. iron(III) oxide

Fe^{3+} O^{2-}

Fe_2O_3

copper (II) chloride

Cu^{2+} Cl^{1-}

$CuCl_2$

copper (III) bromide

Cu^{3+} Br^{1-}

$CuBr_3$

Feb 8-2:26 PM

Try These

Write the formula for each of the following:

1. nickel (II) phosphide

$Ni^{2+}P^{3-}$

Ni_3P_2

2. copper (I) chloride

$Cu^{1+}Cl^{1-}$

$CuCl$

3. calcium oxide

$Ca^{2+}O^{2-}$

CaO

4. Iron (III) oxide

$Fe^{3+}O^{2-}$

Fe_2O_3

5. sodium sulfide

$Na^{1+}S^{2-}$

Na_2S

Apr 13-9:39 AM