Name Answer Key Hour _____

DETERMINING OXIDATION NUMBER

Honors Chemistry

** Calculate and list the oxidation numbers of each element in the following compounds.*

1. HCl
   H = +1
   Cl = -1
2. Na_2O
   Na = +1
   O = -2
3. ClO^-
   Cl = +1
   O = -2
4. $KMnO_4$
   K = +1
   Mn = +7
   O = -2
5. SO_4^{2-}
   S = +6
   O = -2
6. NO_3^-
   N = +5
   O = -2
7. CO_3^{2-}
   C = +4
   O = -2
8. CrO_4^{2-}
   Cr = +6
   O = -2
9. $Cr_2O_7^{2-}$
   Cr = +6
   O = -2
10. Fe_2O_3
    Fe = +3
    O = -2
11. HSO_4^-
    H = +1
    S = +6
    O = -2
12. K_2CO_3
    K = +1
    C = +4
    O = -2
13. Sb_2O_5
    Sb = +5
    O = -2
14. $Al(NO_3)_3$
    Al = +3
    N = +5
    O = -2
15. $Mg_3(PO_4)_2$
    Mg = +2
    P = +5
    O = -2
16. $NaBrO_3$
    Na = +1
    Br = +5
    O = -2
17. IO_3^-
    I = +5
    O = -2
18. MnO_4^-
    Mn = +7
    O = -2
19. BrO_3^-
    Br = +5
    O = -2
20. $(NH_4)_2S$
    N = -3
    H = +1
    S = -2

Substance	Oxidation Number	Substance	Oxidation Number
$Mg(ClO_2)_2$	Mg = +2 Cl = +3 O = -2	H_2SO_3	H = +1 S = +4 O = -2
NH_4^+	N = -3 H = +1	NaCl	Na= +1 Cl= -1
PO_3^{3-}	P = +3 O = -2	CN^-	C = +2 N = -3
I_2	I = 0	Cl^-	Cl = -1
CO_2	C = +4 O = -2	MnO_2	Mn = +4 O = -2
HNO_2	H = +1 N = +3 O = -2	$AgNO_3$	Ag = +1 N= +5 O = -2
$KClO_3$	K = +1 Cl = +5 O = -2	$Ca(OH)_2$	Ca = +2 O = -2 H = +1
$Na_2Cr_2O_7$	Na = +1 Cr = +6 O = -2	$Ba(ClO_3)_2$	Ba = +2 Cl = +5 O = -2
Cd^{2+}	Cd = +2	Cl_2	Cl = 0
$FeCl_3$	Fe = +3 Cl = -1	H_2O_2	H = +1 O = -1
SrO	Sr = +2 O = -2	$MgBr_2$	Mg = +2 Br = -1
AsO_4^{3-}	As = +5 O = -2	NH_3	N = -3 H = +1
Fe^{3+}	Fe = +3	Ni	Ni = 0