

YOU MUST STAPLE YOUR PAGES TOGETHER NO STAPLE = NO CREDIT!!!! You CAN circle your answers on this page and turn it in.

Circle anything that applies (there may be more than one thing circled in each problem):

1) dinitrogen pentoxide:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
2) barium sulfate:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
3) mercury (II) bromide:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
4) acetic acid:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
5) hydroiodic acid:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
6) carbon dioxide:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
7) nitric acid:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
8) sulfuric acid:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
9) ammonium oxalate:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
10) nickel (II) phosphate:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
11) perchloric acid:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
12) lithium chromate:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
13) silver chloride:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
14) strontium hydroxide:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
15) pure water:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
16) lead (II) acetate:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
17) nitrous acid:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
18) hydrocyanic acid:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
19) hydrofluoric acid:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE
20) sodium oxide:	soluble salt	insoluble salt	strong acid	weak acid	molecular compound	SE	WE	NE

DO NOT WRITE YOUR ANSWERS FOR THIS SECTION ON THIS SHEET (please do NOT turn in this page), PLEASE USE A SEPARATE PIECE OF PAPER AND WRITE NEATLY.

Write the net ionic equation for each of the following reactions (assume all are in water solution):

- 1) aluminum hydroxide and sulfuric acid
- 2) ammonium sulfide and lithium oxide
- 3) potassium hydroxide and selenic acid
- 4) hydrobromic acid and silver nitrate
- 5) nitric acid and calcium hydroxide
- 6) rubidium chromate and chromium (III) acetate
- 7) ammonium phosphate and manganese (IV) sulfate
- 8) cesium arsenate and potassium sulfite
- 9) magnesium oxide and hydroiodic acid
- 10) lithium sulfate and barium nitrate
- 11) sodium hydroxide and benzoic acid ($\text{HC}_7\text{H}_5\text{O}_2$)
- 12) solid magnesium metal and acetic acid react to form magnesium acetate and hydrogen gas
- 13) iron (III) carbonate and chloric acid
- 14) sodium fluoride and calcium nitrate
- 15) titanium (III) iodide and mercury (I) acetate
- 16) bismuth (V) chlorate and aluminum nitrate
- 17) solid calcium bicarbonate and hydrobromic acid
- 18) dihydrogen monosulfide gas and cadmium chloride
- 19) lithium oxalate and calcium perchlorate
- 20) strontium hydroxide and hydrochloric acid
- 21) oxalic acid and barium hydroxide