

Revised August 2011

HONORS WORKSHEET 5a: ANSWERS

1.

- (a) $K_2S \rightarrow 2K^+_{(aq)} + S^{2-}_{(aq)}$
(b) $Ni(NO_3)_2 \rightarrow Ni^{2+}_{(aq)} + 2NO_3^-_{(aq)}$
(c) $MgSO_4 \rightarrow Mg^{2+}_{(aq)} + SO_4^{2-}_{(aq)}$
(d) $Na_3PO_4 \rightarrow 3Na^+_{(aq)} + PO_4^{3-}_{(aq)}$
(e) $(NH_4)_2CO_3 \rightarrow 2NH_4^+_{(aq)} + CO_3^{2-}_{(aq)}$

2.

- (a) I
(b) S
(c) I
(d) I
(e) S
(f) I
(g) S
(h) S
(i) S
(j) S

3.

- (a) NO REACTION
(b) $Pb(NO_3)_2(aq) + (NH_4)_2CrO_4 \rightarrow PbCrO_4(s) + 2NH_4NO_3(aq)$
 $Pb^{2+}_{(aq)} + CrO_4^{2-}_{(aq)} \rightarrow PbCrO_4(s)$
(c) NO REACTION
(d) $2AgNO_3 + Na_2SO_4 \rightarrow 2NaNO_3 + Ag_2SO_4(s)$
 $2Ag^+_{(aq)} + SO_4^{2-}_{(aq)} \rightarrow Ag_2SO_4(s)$
(e) $2K_3PO_4(aq) + 3Co(NO_3)_2(aq) \rightarrow 6KNO_3(aq) + Co_3(PO_4)_2(s)$
 $3Co^{2+}_{(aq)} + 2PO_4^{3-}_{(aq)} \rightarrow Co_3(PO_4)_2(s)$
(f) NO REACTION
(g) NO REACTION
(h) NO REACTION
(i) NO REACTION
(j) $2Na_3PO_4(aq) + 3CuCl_2(aq) \rightarrow Cu_3(PO_4)_2(s) + 6NaCl(aq)$
 $3Cu^{2+}_{(aq)} + 2PO_4^{3-}_{(aq)} \rightarrow Cu_3(PO_4)_2(s)$
(k) $SrCl_2(aq) + Li_2SO_4(aq) \rightarrow 2LiCl(aq) + SrSO_4(s)$
 $Sr^{2+}_{(aq)} + SO_4^{2-}_{(aq)} \rightarrow SrSO_4(s)$

(No Reaction = 1 point, others 4 points each)