SCIENCE WORKSHEET - Chemistry

Balance the following chemical equations.

1. Fe +
$$H_2SO_4 \longrightarrow Fe_2(SO_4)_3 + H_2$$

2. ___
$$CH_4$$
 + ___ O_2 \longrightarrow ___ CO_2 + ___ H_2O_2

3. ____ SiCl₄(
$$\ell$$
) + ___ H₂O(ℓ) \longrightarrow ___ SiO₂(s) + ___ HCl(aq)

4. ____ AgI + ___ Na₂S
$$\longrightarrow$$
 ___ Ag₂S + ___ NaI

5. ____
$$NH_3 + _{--} O_2 \longrightarrow _{--} NO + _{--} H_2O$$

6. ____
$$FeO_3(s)$$
 + ___ $CO(g)$ \longrightarrow ___ $Fe(l)$ + ___ $CO_2(g)$

7.
$$\longrightarrow$$
 SiO₂ + \longrightarrow HF \longrightarrow SiF₄ + \longrightarrow H₂O

8. ____ NaBr + ___ Cl₂
$$\longrightarrow$$
 ___ NaCl + ___ Br₂

9. ____ (NH₄)₃PO₄ + ____ Pb(NO₃)₄
$$\longrightarrow$$
 ____ Pb₃(PO₄)₄ + ____ NH₄NO₃

10. ___ Mg(OH)₂ + ___ HCl
$$\longrightarrow$$
 ___ MgCl₂ + ___ H₂O

Answer Sheet:

1.
$$\underline{}$$
 Fe + $\underline{}$ H₂SO₄ \longrightarrow $\underline{}$ Fe₂(SO₄)₃ + $\underline{}$ H₂

2.
$$_{-1}^{1}$$
 CH₄ + $_{-2}^{2}$ O₂ \longrightarrow $_{-1}^{1}$ CO₂ + $_{-2}^{2}$ H₂O

3.
$$1$$
 SiCl₄(ℓ) + 2 H₂O(ℓ) \longrightarrow 1 SiO₂(s) + 4 HCl(aq)

4.
$$2$$
 AgI + 1 Na₂S \longrightarrow 1 Ag₂S + 2 NaI

5.
$$4$$
 NH₃ + 5 O₂ \longrightarrow 4 NO + 6 H₂O

6.
$$\underline{\hspace{1cm}}^{1}$$
 FeO₃(s) + $\underline{\hspace{1cm}}^{3}$ CO(g) \longrightarrow $\underline{\hspace{1cm}}^{1}$ Fe(ℓ) + $\underline{\hspace{1cm}}^{3}$ CO₂(g)

7.
$$\frac{1}{1}$$
 SiO₂ + $\frac{4}{1}$ HF \longrightarrow $\frac{1}{1}$ SiF₄ + $\frac{2}{1}$ H₂O

8.
$$\frac{2}{2}$$
 NaBr + $\frac{1}{2}$ Cl₂ \longrightarrow $\frac{2}{2}$ NaCl + $\frac{1}{2}$ Br₂

9.
$$4 (NH_4)_3PO_4 + 3 Pb(NO_3)_4 \longrightarrow 1 Pb_3(PO_4)_4 + 12 NH_4NO_3$$

10.
$$\frac{1}{1}$$
 Mg(OH)₂ + $\frac{2}{1}$ HCl \longrightarrow $\frac{1}{1}$ MgCl₂ + $\frac{2}{1}$ H₂O