

Question #58953, Chemistry, Other

I need IONIC equations for the reaction of:

Zinc foil with zinc sulphate solution and copper sulphate solution and silver nitrate solutions

Silver wire with zinc sulphate solution and copper sulphate solution and silver nitrate solutions

Copper foil with zinc sulphate solution and copper sulphate solution and silver nitrate solutions

Answer:

- a)  $\text{Zn} + \text{Zn}^{2+} + \text{SO}_4^{2-} \neq$
- b)  $\text{Cu}^{2+} + \text{SO}_4^{2-} + 2\text{Ag}^+ + 2\text{NO}_3^- = \text{Cu}^{2+} + 2\text{NO}_3^- + \text{Ag}_2\text{SO}_4\downarrow$
- c)  $\text{Ag} + \text{ZnSO}_4 \neq$
- d)  $\text{Cu}^{2+} + \text{SO}_4^{2-} + 2\text{Ag}^+ + 2\text{NO}_3^- = \text{Ag}_2\text{SO}_4\downarrow + \text{Cu}(\text{NO}_3)_2$
- e)  $\text{Cu} + \text{ZnSO}_4 \neq$
- f)  $\text{Cu}^{2+} + \text{SO}_4^{2-} + 2\text{Ag}^+ + 2\text{NO}_3^- = \text{Cu}^{2+} + 2\text{NO}_3^- + \text{Ag}_2\text{SO}_4\downarrow$