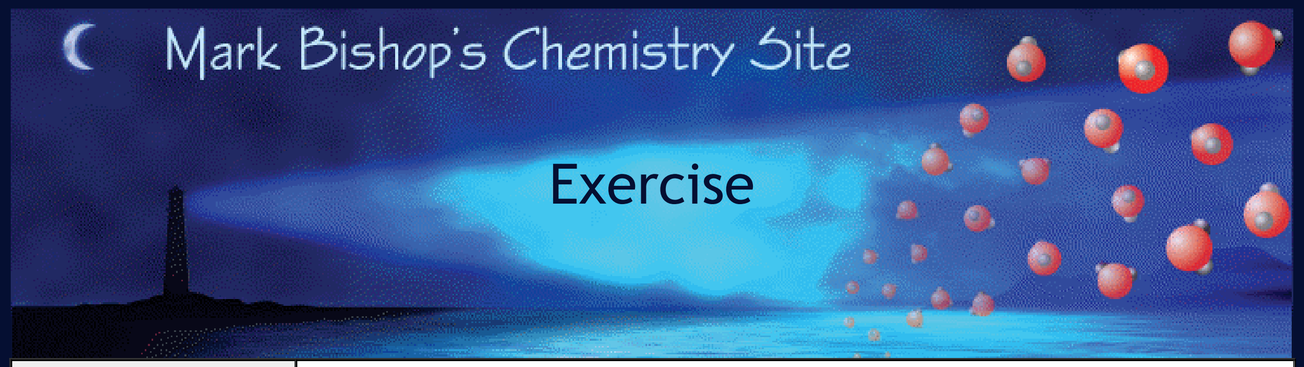

Exercise - Balance the following redox equations using either the inspection technique or the oxidation number method. Be sure to check that the atoms and the charge are balanced for each. (The answers are at the bottom of this page.)

a. $Al(s) + MnO_2(s) \rightarrow Al_2O_3(s) + Mn(s)$

b. $SO_2(g) + HNO_2(aq) \rightarrow H_2SO_4(aq) + NO(g)$

c. $HNO_3(aq) + H_2S(aq) \rightarrow NO(g) + S(s) + H_2O(l)$

d. $Al(s) + H_2SO_4(aq) \rightarrow Al_2(SO_4)_3(aq) + H_2(g)$

- Click here to see the Study Sheet for this task.

Click on the following links to see examples.

- Example 1
- Example 2
- Example 3

- Return to the Balancing Redox Equations Page.

Answers

a. $4Al(s) + 3MnO_2(s) \rightarrow 2Al_2O_3(s) + 3Mn(s)$

b. $SO_2(g) + 2HNO_2(aq) \rightarrow H_2SO_4(aq) + 2NO(g)$

c. $2HNO_3(aq) + 3H_2S(aq) \rightarrow 2NO(g) + 3S(s) + 4H_2O(l)$

d. $2Al(s) + 3H_2SO_4(aq) \rightarrow Al_2(SO_4)_3(aq) + 3H_2(g)$

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