

## Practice Sheet: Balancing Redox Reactions

1. Indicate the oxidation number of the ***bold-italicized*** element in the following compounds:

- a. ***CO***
- b. ***CO***<sub>2</sub>
- c. ***IF***<sub>7</sub>
- d. Li<sub>3</sub>***N***
- e. K<sub>2</sub>***S***
- f. ***SnCl***<sub>4</sub>
- g. Ba***SO***<sub>4</sub>
- h. ***OF***<sub>2</sub>
- i. Ca(***NO***<sub>3</sub>)<sub>2</sub>
- j. ***Fe***<sub>2</sub>O<sub>3</sub>
- k. H***ClO***
- l. H***ClO***<sub>3</sub>

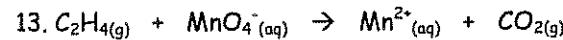
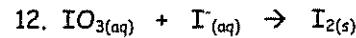
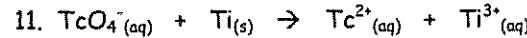
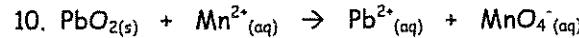
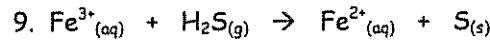
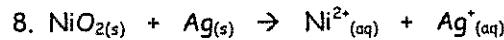
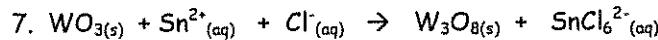
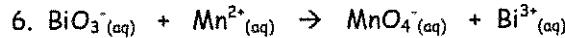
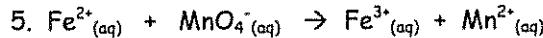
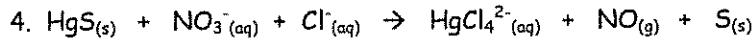
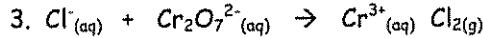
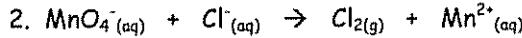
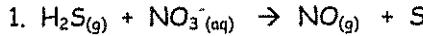
2. Indicate the oxidation number of the italicized element in the following ions:

- a. ***PO***<sub>4</sub><sup>3-</sup>
- b. ***BO***<sub>3</sub><sup>3-</sup>
- c. ***ZrI***<sub>3</sub><sup>-</sup>
- d. ***IO***<sub>3</sub><sup>-</sup>
- e. ***AsO***<sub>3</sub><sup>3-</sup>
- f. H***CO***<sub>3</sub><sup>-</sup>
- g. NH<sub>4</sub><sup>+</sup>
- h. ***NO***<sub>3</sub><sup>-</sup>
- i. ***SO***<sub>4</sub><sup>2-</sup>
- j. ***P***<sub>3</sub>O<sub>10</sub><sup>5-</sup>
- k. ***S***<sub>2</sub>O<sub>3</sub><sup>2-</sup>

3. Indicate the oxidation number of the italicized element in the following compounds:

- a. ***PCl***<sub>3</sub>
- b. ***PCl***<sub>5</sub>
- c. ***POCl***<sub>2</sub>
- d. ***SO***<sub>2</sub>
- e. ***SO***<sub>3</sub>
- f. ***SCl***<sub>2</sub>
- g. ***CrCl***<sub>3</sub>
- h. K<sub>2</sub>***CrO***<sub>4</sub>
- i. ***Cr***<sub>2</sub>O<sub>3</sub>
- j. ***MnO***<sub>2</sub>
- k. KM***nO***<sub>4</sub>
- l. M***n***<sub>2</sub>O<sub>7</sub>

Balance the following equations that are in acidic solution:



Balance the following equations that are in basic solution:

