

## INTRODUCTION TO REDOX CHEMISTRY

Complete the sentences below.

- 1) Oxidation occurs when a substance \_\_\_\_\_ electrons and \_\_\_\_\_ in oxidation state.
- 2) Reduction occurs when a substance \_\_\_\_\_ electrons and \_\_\_\_\_ in oxidation state.

Determine and then write the oxidation state of the underlined element in the space provided. You must include the "+" or "-" sign in front of the oxidation number.

**Example:**

Oxidation State: +6

- |     |                                        |                        |
|-----|----------------------------------------|------------------------|
| 3)  | <u>S</u> O <sub>2</sub>                | Oxidation State: _____ |
| 4)  | H <u>N</u> O <sub>3</sub>              | Oxidation State: _____ |
| 5)  | <u>Cr</u> O <sub>4</sub> <sup>2-</sup> | Oxidation State: _____ |
| 6)  | Na <u>Cl</u> O <sub>3</sub>            | Oxidation State: _____ |
| 7)  | <u>Mn</u> O <sub>2</sub>               | Oxidation State: _____ |
| 8)  | <u>V</u> O <sub>4</sub> <sup>3-</sup>  | Oxidation State: _____ |
| 9)  | <u>Mn</u> O <sub>4</sub> <sup>2-</sup> | Oxidation State: _____ |
| 10) | <u>Cr</u> <sub>2</sub> O <sub>3</sub>  | Oxidation State: _____ |