[www.ck12.org](http://www.ck12.org/)  **Assigning Oxidation Numbers Practice Worksheet**

# True False Questions

Indicate True or False for the following Statements.

1. Calcium has an oxidation number of +1 only. ( True/False )
2. In the following compound, KMnO4, the oxidation number for manganese is 7+. ( True/False )
3. The oxidation number of a free element is zero. ( True/False )

# Multiple Choice Questions

For each question, four alternative choices are given, of which only one is correct. You have to select the correct alternative and mark it in the appropriate option.

1. Choose the oxidation number of *N* in *NO*.
   1. −1
   2. +1
   3. −2
   4. +2
2. Which of the following is the most stable ion?
   1. *Sc*+4
   2. *Mn*+3
   3. *Fe*+2
   4. *Mn*+2
3. Iron can form \_\_\_\_\_ ions.
   1. *Fe*3−*, Fe*4+
   2. *Fe*3−*, Fe*4−
   3. *Fe*2+*, Fe*3+
   4. *Fe*2−*, Fe*3−
4. Choose the oxidation number for the element zinc.
   1. One
   2. Zero
   3. Two
   4. Five
5. What are the oxidation states of nitrogen in the compounds NO, NO2, N2O3, N2O4 and N2O5 respectively?

a. +1, +2, +3, +4, +5

* 1. +2, +4, +3, +8, +5
  2. +2, +4, +3, +4, +5
  3. +2, +2, +6, +4, +5
  4. +1, +4, +3, +8, +

1. Choose the oxidation number of H in HCl.
   1. +1
   2. −2
   3. +2
   4. −1
2. What are the oxidation states for the common anions of sulfur and the common cations of sulfur respectively?

a. -6, -2, +2, +4

* 1. -6, -4, +2, +4
  2. -2, +2, +6
  3. -1, -2, +4, +6
  4. -2, +4, +6

# Answer Keys

1. FALSE
2. TRUE
3. TRUE
4. +2
5. *Mn*+2
6. *Fe*2+*, Fe*3+
7. Zero
8. +2, +4, +3, +4, +5
9. +1
10. -2, +4, +6