[www.ck12.org](http://www.ck12.org/) **Electrical Potential Practice Worksheet**

**Fill in the Blanks Questions**

Fill in the answer blanks with correct answer.

1. The \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ is the difference in reduction potential between the two-half-cells. Answer:

**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. In what units is electrical potential measured?
   1. ohms
   2. joules
   3. volts
   4. amperes
2. Given the following reduction potentials:

*Ag*+ + *e*− →*Ag* +0*.*80*v Cu*2+ + 2*e*− → *Cu* +0*.*3 *v*

An electrochemical cell is constructed with electrodes of silver and copper. What will be oxidized and what will be reduced?

* 1. Cu will be oxidized and Ag+ will be reduced.
  2. Ag will be oxidized and Cu2+ will be reduced.
  3. Cu2+ will be oxidized and Ag will be reduced.
  4. Ag+ will be oxidized and Cu will be reduced.

4. Which metal has the least tendency to be oxidized?

* 1. Mg
  2. Pb
  3. Sn
  4. Ni

1. Which ions below have the greatest tendency to be reduced?
   1. Fe2+
   2. Li+
   3. Ca2+
   4. Hg2+
2. How is the electrical potential measured?
   1. It is measured as the potential between two identical half-cells.
   2. It is measured as the potential of one half-cell.
   3. It is measured as the potential between two different half-cells.
   4. Electrical potentials can only be calculated theoretically, but not measured experimentally.
3. What happens in the half-cell of a voltaic cell in which the substance involved has the lower reduction potential?
   1. The metal ions are reduced.
   2. Nothing happens.
   3. The metal electrode is oxidized.
   4. The metal ions are oxidized.

**Answer Keys**

1. cell , potential
2. volts
3. Cu will be oxidized and Ag+ will be reduced.
4. Pb
5. Hg2+
6. It is measured as the potential between two different half-cells.
7. The metal electrode is oxidized.