**Ions Practice Worksheet** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Determine the charges on the following:**

1. An atom having lost two electrons \_\_\_\_\_\_\_\_

2. An atom having lost six electrons \_\_\_\_\_\_\_\_

3. An atom having gained one electron \_\_\_\_\_\_\_\_

4. An atom having gained three electrons \_\_\_\_\_\_\_\_

5. An atom having lost five electrons \_\_\_\_\_\_\_\_

6. An atom having gained two electrons \_\_\_\_\_\_\_\_

7. An atom having lost one electron \_\_\_\_\_\_\_\_

8. An atom having gained four electrons \_\_\_\_\_\_\_\_

**Complete the following:**

1. For each of the positive ions listed in column 1, determine the number of electrons that ion contains. \_\_\_\_ Al+3 \_\_\_\_ Fe+3

\_\_\_\_ Mg+2 \_\_\_\_ Sn+2

\_\_\_\_ Co+2 \_\_\_\_ Co+3

\_\_\_\_ Li+1 \_\_\_\_ Cr+3

\_\_\_\_ Rb+1 \_\_\_\_ Pt+2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Element/Ion | Atomic Number | Number of Protons | Number of Neutrons | Number of Electrons | Mass Number |
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|  |  |  |  |  |  |
|  |  | 30 |  | 28 | 66 |
|  | 76 |  | 114 |  |  |

**Answer the following questions:**

1. Define an ion.
2. Answer the following about ions:
   1. How can you tell if an atom has a negative charge?
   2. What do we call an ion with a negative charge?
   3. How can you tell if an atom has a positive charge?
   4. What do we call an ion with a positive charge?