**SI WORKSHEET 3**

1. Fill in the Blanks. (All are ions)

|  |  |  |
| --- | --- | --- |
| Formula | Name | Charge of the ion |
| NO3 |  |  |
| ClO4 |  |  |
| ClO3 |  |  |
| NH4 |  |  |
| SO4 |  |  |
| SO3 |  |  |
| PO4 |  |  |
| PO3 |  |  |
| H3O |  |  |
| OH |  |  |

1. Name or give formula for following compounds:

|  |  |
| --- | --- |
| Name | Formula |
|  | MnO2 |
| Copper (II) oxide |  |
| Copper (II) chloride |  |
| Carbon tetrachloride |  |
| Ammonium phosphate |  |
| Sodium Sulfate |  |
|  | PCl3 |
| Sodium nitride |  |
| Aluminum phosphate |  |
|  | CH3COO- |
| Thiosulfate |  |
| Dichromate |  |
|  | CO32- |
| Copper (II) Sulfate |  |

1. What is the common charge of the following atoms when they form ions/have charges? Na, Ag, Br, O, Zn, B, P, and Ca? (in respective order):
2. Compound has the formula AO, which of the following compounds could be substituted for A? (Ca, H, Na, Sr)
3. Consider silica, or silicon dioxide, SiO2. What is the charge on the Si?
4. Which of these is not a valid chemical formula? CuSO4, Cu2SO4, Al3O2, or OF2?
5. What is the percent composition of oxygen in Calcium phosphate?
6. What is the percent composition of water in Copper (II) sulfate pentahydrate? What about the % of oxygen?
7. Which of these has the strongest force of attraction of the following: Sodium oxide, Magnesium sulfide, Sodium iodide, or Aluminum phosphate?
8. What is an electrolyte? Why is HCl and electrolyte while Carbon tetrachloride is not?