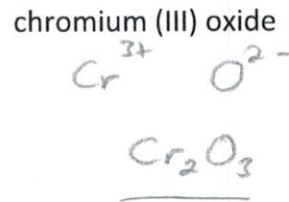
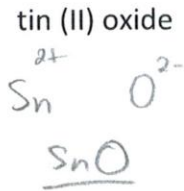


Multivalent Compounds

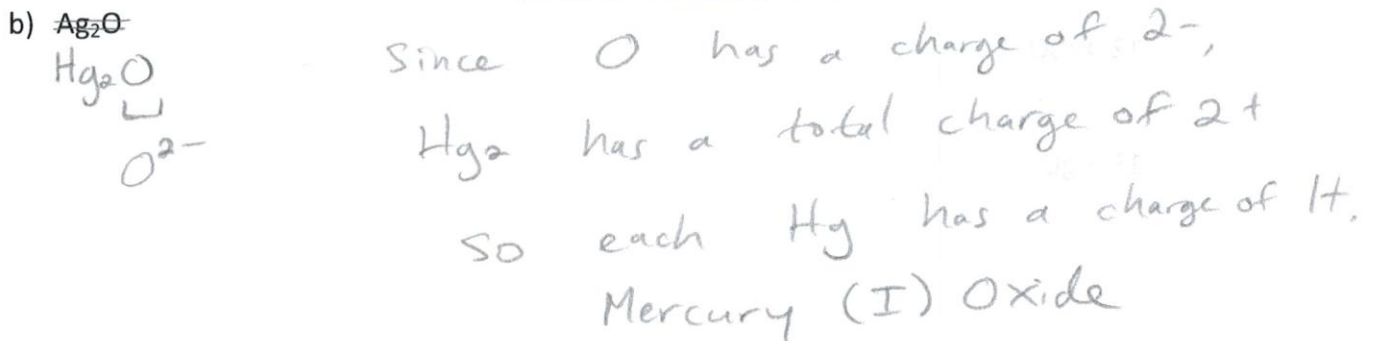
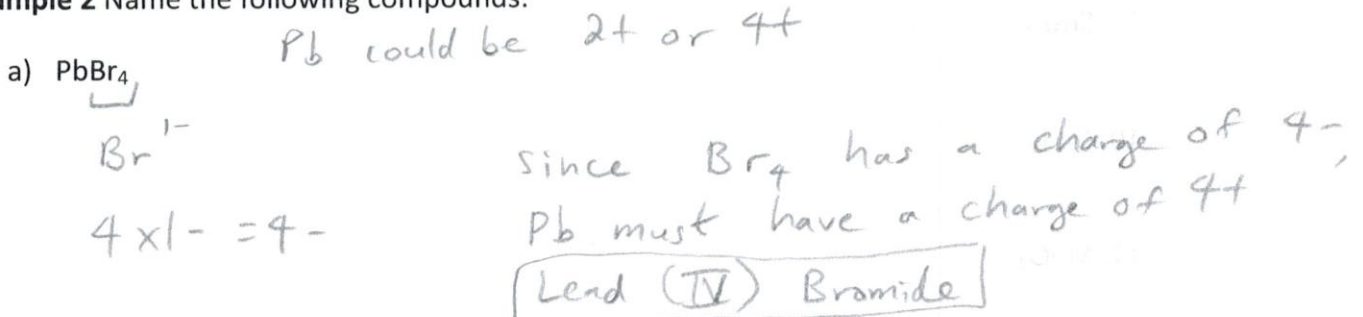
Example 1 Find the compound formula.

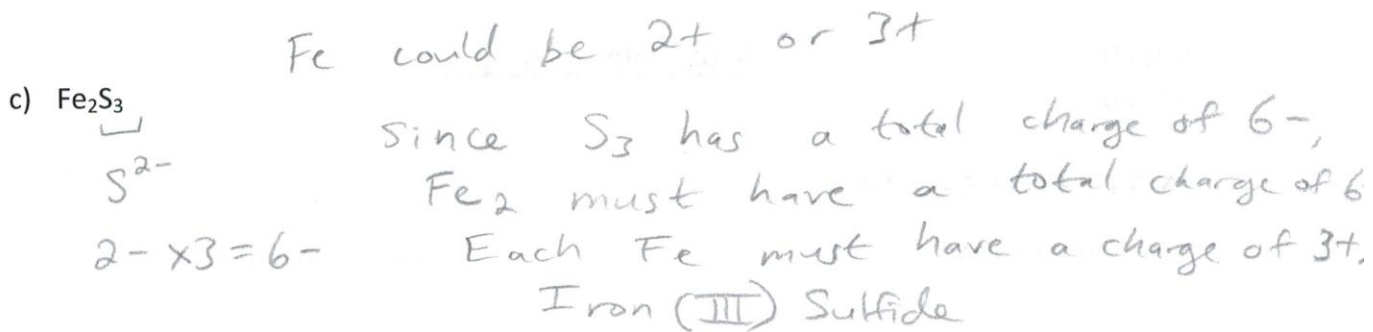


Practice:

- | | | | |
|---------------------------|------------------------------------|----------------------------|------------------------------------|
| 1. iron (III) chloride | <u>FeCl₃</u> | 2. gold (III) bromide | <u>AuBr₃</u> |
| 3. copper (I) sulfide | <u>Cu₂S</u> | 4. lead (II) bromide | <u>PbBr₂</u> |
| 5. lead (IV) oxide | <u>PbO₂</u> | 6. tin (IV) iodide | <u>SnI₄</u> |
| 7. copper (II) sulfide | <u>CuS</u> | 8. lead (IV) nitride | <u>Pb₃N₄</u> |
| 9. tin (II) iodide | <u>SnI₂</u> | 10. cobalt (II) phosphide | <u>Co₃P₂</u> |
| 11. mercury (I) sulfide | <u>Hg₂S</u> | 12. tin (II) sulfide | <u>SnS</u> |
| 13. copper (II) iodide | <u>CuI₂</u> | 14. manganese (II) oxide | <u>MnO</u> |
| 15. chromium (II) nitride | <u>Cr₃N₂</u> | 16. mercury (II) fluoride | <u>HgF₂</u> |
| 17. tin (IV) oxide | <u>SnO₂</u> | 18. chromium (II) chloride | <u>CrCl₂</u> |
| 19. iron (II) phosphide | <u>Fe₃P₂</u> | | |

Example 2 Name the following compounds:





Practice:

1. FeO Iron (II) Oxide
2. Fe_2O_3 Iron (III) Oxide
3. CuBr Copper (I) Bromide
4. PbO Lead (II) Oxide
5. PbO_2 Lead (IV) Oxide
6. CuS Copper (II) Sulfide
7. ZnBr_2 Zinc Bromide * Don't use roman numerals when there is only one charge!
8. AuCl_3 Gold (III) Chloride
9. Sn_3P_4 Tin (IV) Phosphide
10. CrCl_3 Chromium (III) Chloride
11. MnO_2 Manganese (IV) Oxide
12. Hg_2O Mercury (I) Oxide
13. HgO Mercury (II) Oxide

14. Co_2S_3 Cobalt (III) Sulfide

15. CoO Cobalt (II) Oxide

Complete the table below.

Compound Formula	Name
PbCl_4	lead (IV) chloride
PbF_2	Lead (II) Fluoride
HgO	Mercury (II) Oxide
Au_2S_3	gold (III) sulphide
Co_3P_2	cobalt (II) phosphide
CrO	Chromium (II) Oxide
CuS	copper (II) sulphide
CuF_2	copper (II) fluoride
SnCl_4	tin (IV) chloride
PbCl_2	Lead (II) Chloride
NiO	nickel (II) oxide
NiF_3	nickel (III) fluoride
MnCl_4	manganese (IV) choride
Co_3P_2	cobalt (II) phosphide
Au_2S	gold (I) sulphide
Mn_3P_4	manganese (IV) phosphide
NiN	Nickel (III) Nitride
SbCl_5	antimony (V) chloride
SnO_2	tin (IV) oxide