

Date: \_\_\_\_\_

Name: \_\_\_\_\_

## FORMULA #1

### A. Name the following compounds

- CaCl<sub>2</sub>                    calcium chloride
- AgCl                      silver chloride
- MgO                      magnesium oxide
- NaBr                    [7647-15-6] sodium bromide
- Al<sub>2</sub>O<sub>3</sub>                    aluminum oxide
- KI                        [7681-11-0] potassium iodide
- ZnCl<sub>2</sub>                   zinc chloride
- Li<sub>2</sub>O                      lithium oxide
- BaO                      barium oxide
- CaBr<sub>2</sub>                   [7789-41-3] calcium bromide
- MgCl<sub>2</sub>                   magnesium chloride
- AgI                       [7783-06-2] silver iodide
- ZnS                      zinc sulphide
- BaF<sub>2</sub>                    barium fluoride
- Ca<sub>3</sub>P<sub>2</sub>                   [1305-09-3] calcium phosphide
- Na<sub>2</sub>O                    sodium oxide
- AlN                      [24304-08-3] aluminum nitride
- SrBr<sub>2</sub>                   [10476-81-0] strontium bromide
- Na<sub>2</sub>Se                   [1313-85-3] sodium selenide
- K<sub>2</sub>O                      potassium oxide
- H<sub>2</sub>S                      hydrogen sulphide
- Be<sub>3</sub>N<sub>2</sub>                   [1304-54-7] beryllium nitride
- LiF                       lithium fluoride
- AlCl<sub>3</sub>                   aluminum chloride
- SrO                      [1314-11-0] strontium oxide

### B. Write the formulae for the following compounds

- sodium chloride                    NaCl
- potassium bromide                [7758-03-3] KBr
- calcium iodide                      [110102-09-6] CaI<sub>2</sub>
- zinc oxide                            ZnO
- silver sulphide                      Ag<sub>2</sub>S
- potassium sulphide                K<sub>2</sub>S
- barium hydride                      [1407-09-3] BaH<sub>2</sub>
- silver oxide                          Ag<sub>2</sub>O
- lithium chloride                    LiCl
- hydrogen bromide                 [10035-10-6] HBr
- strontium chloride                [10476-85-4] SrCl<sub>2</sub>
- lithium nitride                      [28134-62-3] Li<sub>3</sub>N
- zinc bromide                        [7699-45-8] ZnBr<sub>2</sub>
- sodium iodide                      [7681-82-3] NaI
- barium chloride                    BaCl<sub>2</sub>
- potassium hydride                [1361-36-3] KH
- aluminum sulphide                Al<sub>2</sub>S<sub>3</sub>
- silver telluride                      [12002-99-2] Ag<sub>2</sub>Te
- calcium sulphide                    CaS
- magnesium phosphide           [12057-74-6] Mg<sub>3</sub>P<sub>2</sub>
- zinc selenide                       [1315-09-9] ZnSe
- sodium hydride                    [1480-99-3] NaH
- magnesium fluoride              MgF<sub>2</sub>
- zinc nitride                         [1313-49-1] Zn<sub>3</sub>N<sub>2</sub>
- aluminum phosphide              [20859-73-8] AlP

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## FORMULA #2

### A. Name the following compounds

- CaCO<sub>3</sub> [471-34-1] calcium carbonate
- NH<sub>4</sub>NO<sub>3</sub> ammonium nitrate
- ZnSO<sub>4</sub> zinc sulphate
- KNO<sub>3</sub> [7737-19-1] potassium nitrate
- Mg(OH)<sub>2</sub> [1309-42-8] magnesium hydroxide
- LiHCO<sub>3</sub> [see CAS] lithium hydrogen carbonate
- BaSO<sub>4</sub> barium sulphate
- Al(ClO<sub>4</sub>)<sub>3</sub> [see CAS] aluminum perchlorate
- Sr(OH)<sub>2</sub> [18480-07-4] strontium hydroxide
- KClO<sub>3</sub> [3811-04-9] potassium chlorate
- NaHCO<sub>3</sub> [497-19-8] sodium hydrogen carbonate
- ZnCrO<sub>4</sub> [13330-65-9] zinc chromate
- MgSO<sub>4</sub> [7487-88-8] magnesium sulphate
- BaCO<sub>3</sub> [513-77-9] barium carbonate
- KMnO<sub>4</sub> [7722-84-1] potassium permanganate
- AgNO<sub>3</sub> silver nitrate
- Al(OH)<sub>3</sub> [21645-51-2] aluminum hydroxide
- Mg(ClO<sub>4</sub>)<sub>2</sub> [11004-41-4] magnesium perchlorate
- Na<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> [110588-01-4] sodium dichromate
- (NH<sub>4</sub>)<sub>3</sub>PO<sub>4</sub> ammonium phosphate
- Na<sub>2</sub>SO<sub>3</sub> [7737-83-1] sodium sulphite
- Ag<sub>2</sub>SO<sub>4</sub> silver sulphate
- KHS potassium hydrogen sulphide
- NH<sub>4</sub>HSO<sub>4</sub> [7803-63-6] ammonium hydrogen sulphate
- Zn(CH<sub>3</sub>COO)<sub>2</sub> [3017-44-4] zinc acetate

### B. Write the formulae for the following compounds

- zinc carbonate [3488-35-8] ZnCO<sub>3</sub>
- lithium carbonate [354-13-2] Li<sub>2</sub>CO<sub>3</sub>
- zinc nitrate [7779-09-1] Zn(NO<sub>3</sub>)<sub>2</sub>
- sodium permanganate [10101-30-5] NaMnO<sub>4</sub>
- calcium hypochlorite [7778-54-1] Ca(ClO)<sub>2</sub>
- lithium cyanide [2408-36-8] LiCN
- magnesium acetate [142-72-1] Mg(CH<sub>3</sub>COO)<sub>2</sub>
- ammonium carbonate [506-87-6] (NH<sub>4</sub>)<sub>2</sub>CO<sub>3</sub>
- sodium nitrite [7632-00-0] NaNO<sub>2</sub>
- potassium carbonate [384-08-7] K<sub>2</sub>CO<sub>3</sub>
- strontium perchlorate [13450-97-2] Sr(ClO<sub>4</sub>)<sub>2</sub>
- barium sulphite [7787-39-1] BaSO<sub>3</sub>
- magnesium chlorate [10328-21-1] Mg(ClO<sub>3</sub>)<sub>2</sub>
- sodium hydrogen sulphite [2741-00-1] NaHSO<sub>3</sub>
- aluminum chlorate [15477-33-1] Al(ClO<sub>3</sub>)<sub>3</sub>
- lithium hydroxide [1310-63-1] LiOH
- silver sulphite [13465-98-0] Ag<sub>2</sub>SO<sub>3</sub>
- potassium cyanide [151-50-8] KCN
- strontium carbonate [1433-05-2] SrCO<sub>3</sub>
- barium dichromate [see CAS] BaCr<sub>2</sub>O<sub>7</sub>
- ammonium sulphite [10196-04-0] (NH<sub>4</sub>)<sub>2</sub>SO<sub>3</sub>
- calcium hydroxide [1305-42-0] Ca(OH)<sub>2</sub>
- silver chromate [7784-01-2] Ag<sub>2</sub>CrO<sub>4</sub>
- aluminum sulphate Al<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub>
- zinc phosphate Zn<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>

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## FORMULA #3

### A. Name the following compounds

- CuCl [2758-89-6] copper (I) chloride
- FeO [1344-25-1] iron (II) oxide
- HgBr<sub>2</sub> [2743-47-1] mercury (II) bromide
- PbO<sub>2</sub> [1309-60-6] lead (IV) oxide
- CrS chromium (II) sulphide
- FeCl<sub>3</sub> iron (III) chloride
- CuS copper (II) sulphide
- Cu<sub>2</sub>O copper (I) oxide
- PbS lead (II) sulphide
- SnO [21831-19-4] tin (II) oxide
- SnF<sub>2</sub> tin (II) fluoride
- CrN [24694-95-7] chromium (III) nitride
- CrF<sub>2</sub> chromium (II) fluoride
- MnS manganese (II) sulphide
- BeH<sub>2</sub> [2787-52-2] beryllium hydride
- Fe<sub>2</sub>O<sub>3</sub> iron (III) oxide
- CuCO<sub>3</sub> [no CAS] copper (II) carbonate
- PbSO<sub>3</sub> [no CAS] lead (II) sulphite
- Fe(NO<sub>3</sub>)<sub>3</sub> iron (III) nitrate
- Sn(CH<sub>3</sub>COO)<sub>2</sub> [38389-1] tin (II) acetate
- Cu<sub>2</sub>SO<sub>4</sub> [no CAS] copper (I) sulphate
- HgCrO<sub>4</sub> [no CAS] mercury (II) chromate
- Pb(NO<sub>3</sub>)<sub>2</sub> lead (II) nitrate
- Sn(NO<sub>3</sub>)<sub>4</sub> tin (IV) nitrate
- Sn(SO<sub>4</sub>)<sub>2</sub> [no CAS] tin (IV) sulphate

### B. Write the formulae for the following compounds

- cobalt (II) chloride CoCl<sub>2</sub>
- chromium (II) oxide CrO
- gold (I) chloride [10294-29-4] AuCl
- lead (II) fluoride PbF<sub>2</sub>
- copper (II) telluride [12019-23-7] CuTe
- tin (IV) sulphide SnS<sub>2</sub>
- gold (I) iodide [10294-31-2] AuI
- manganese (III) oxide Mn<sub>2</sub>O<sub>3</sub>
- gold (I) cyanide [100-45-6] AuCN
- iron (III) sulphide Fe<sub>2</sub>S<sub>3</sub>
- cobalt (III) oxide Co<sub>2</sub>O<sub>3</sub>
- gold (III) bromide [10294-39-7] AuBr<sub>3</sub>
- mercury (II) chlorate [no CAS] Hg(ClO<sub>3</sub>)<sub>2</sub>
- lead (II) dichromate [no CAS] PbCr<sub>2</sub>O<sub>7</sub>
- chromium (III) nitrate Cr(NO<sub>3</sub>)<sub>3</sub>
- manganese (III) phosphate MnPO<sub>4</sub>
- tin (II) sulphate SnSO<sub>4</sub>
- copper (II) dichromate [no CAS] CuCr<sub>2</sub>O<sub>7</sub>
- cobalt (III) perchlorate [no CAS] Co(ClO<sub>4</sub>)<sub>3</sub>
- iron (II) acetate [1094-87-9] Fe(CH<sub>3</sub>COO)<sub>2</sub>
- chromium (II) sulphate CrSO<sub>4</sub>
- manganese (II) carbonate MnCO<sub>3</sub> [no CAS]
- copper (II) hydroxide [20427-93-6] Cu(OH)<sub>2</sub>
- cobalt (III) hydroxide [1307-86-4] Co(OH)<sub>3</sub>
- mercury (II) acetate [1000-27-7] Hg(CH<sub>3</sub>COO)<sub>2</sub>

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## FORMULA #4

### A. Write the formulae for the following compounds

- |                              |   |                                    |   |
|------------------------------|---|------------------------------------|---|
| 1. carbon disulphide         | <u>CS<sub>2</sub></u> <small>(122-134-0)</small>              | 11. nitrogen dioxide               | <u>NO<sub>2</sub></u> <small>(10102-94-0)</small>               |
| 2. nitrogen trifluoride      | <u>NF<sub>3</sub></u> <small>(7723-54-2)</small>              | 12. disulphur decafluoride         | <u>S<sub>2</sub>F<sub>10</sub></u> <small>(15714-622-2)</small> |
| 3. phosphorous pentabromide  | <u>PBr<sub>5</sub></u> <small>(7723-54-2)</small>             | 13. xenon hexafluoride             | <u>XeF<sub>6</sub></u> <small>(13363-29-2)</small>              |
| 4. iodine monochloride       | <u>ICl</u> <small>(7723-54-2)</small>                         | 14. dinitrogen monoxide            | <u>N<sub>2</sub>O</u> <small>(10024-97-2)</small>               |
| 5. sulphur hexafluoride      | <u>SF<sub>6</sub></u> <small>(7781-474-1)</small>             | 15. diiodine pentoxide             | <u>I<sub>2</sub>O<sub>5</sub></u> <small>(13292-99-2)</small>   |
| 6. disulphur dinitride       | <u>S<sub>2</sub>N<sub>2</sub></u> <small>(13292-99-2)</small> | 16. diphosphorus tetraiodide       | <u>P<sub>2</sub>I<sub>4</sub></u> <small>(13292-99-2)</small>   |
| 7. boron tribromide          | <u>BBr<sub>3</sub></u> <small>(10962-93-1)</small>            | 17. dichlorine heptoxide           | <u>Cl<sub>2</sub>O<sub>7</sub></u> <small>(10293-85-1)</small>  |
| 8. sulphur tetrachloride     | <u>SCl<sub>4</sub></u> <small>(11421-084-1)</small>           | 18. silicon dioxide                | <u>SiO<sub>2</sub></u> <small>(7812-88-2)</small>               |
| 9. tetrasulphur tetranitride | <u>S<sub>4</sub>N<sub>4</sub></u> <small>(7723-54-2)</small>  | 19. boron trichloride              | <u>BCl<sub>3</sub></u> <small>(10293-85-1)</small>              |
| 10. iodine heptafluoride     | <u>IF<sub>7</sub></u> <small>(13363-29-2)</small>             | 20. sulphur chloride pentafluoride | <u>SClF<sub>5</sub></u> <small>(13292-99-2)</small>             |

### B. Name the following compounds These are a mix of questions (sheets 1-3)

- |  |                                    |  |                                    |
|--|------------------------------------|--|------------------------------------|
| 1. Ca(CN) <sub>2</sub> <small>(10041-4)</small>  | <u>calcium cyanide</u>             | 16. Pb(CH <sub>3</sub> COO) <sub>4</sub> <small>(13363-29-2)</small> | <u>lead (IV) acetate</u>           |
| 2. SnCl <sub>4</sub>   | <u>tin (IV) chloride</u>           | 17. NH <sub>4</sub> HCO <sub>3</sub>                                 | <u>ammonium hydrogen carbonate</u> |
| 3. HgF <sub>2</sub>  | <u>mercury (II) fluoride</u>       | 18. FePO <sub>4</sub>  | <u>iron (III) phosphate</u>        |
| 4. FeI <sub>2</sub> <small>(7783-88-0)</small>   | <u>iron (II) iodide</u>            | 19. Cu(ClO <sub>4</sub> ) <sub>2</sub> <small>(10041-4)</small>      | <u>copper (II) perchlorate</u>     |
| 5. NH <sub>4</sub> Cl  | <u>ammonium chloride</u>           | 20. Pb(ClO <sub>3</sub> ) <sub>2</sub> <small>(10041-4)</small>      | <u>lead (II) chlorate</u>          |
| 6. CuF <sub>2</sub>  | <u>copper (II) fluoride</u>        | 21. HgSO <sub>4</sub>  | <u>mercury (II) sulphate</u>       |
| 7. Ca(MnO <sub>4</sub> ) <sub>2</sub> <small>(10116-76-0)</small>                              | <u>calcium permanganate</u>        | 22. Mn(NO <sub>3</sub> ) <sub>2</sub>                                | <u>manganese (II) nitrate</u>      |
| 8. (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> <small>(7783-20-2)</small>                  | <u>ammonium sulphate</u>           | 23. Cu <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>                  | <u>copper (II) phosphate</u>       |
| 9. Pb(HSO <sub>4</sub> ) <sub>2</sub>  | <u>lead (II) hydrogen sulphate</u> | 24. Fe <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>                  | <u>iron (III) sulphate</u>         |
| 10. CrPO <sub>4</sub>  | <u>chromium (III) phosphate</u>    | 25. Sn(CH <sub>3</sub> COO) <sub>4</sub> <small>(13363-29-2)</small> | <u>tin (IV) acetate</u>            |
| 11. KHSO <sub>4</sub>  | <u>potassium hydrogen sulphate</u> | 26. H <sub>2</sub> SO <sub>4</sub> <small>(7664-95-9)</small>        | <u>hydrogen sulphate</u>           |
| 12. SnI <sub>2</sub> <small>(10294-70-8)</small>   | <u>tin (II) iodide</u>             | 27. Cu(ClO <sub>3</sub> ) <sub>2</sub> <small>(28206-47-8)</small>   | <u>copper (II) chlorate</u>        |
| 13. CrBr <sub>3</sub> <small>(10049-25-8)</small>  | <u>chromium (III) bromide</u>      | 28. Hg <sub>2</sub> CO <sub>3</sub> <small>(10041-4)</small>         | <u>mercury (I) carbonate</u>       |
| 14. (NH <sub>4</sub> ) <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub> <small>(13363-29-2)</small> | <u>ammonium dichromate</u>         | 29. HNO <sub>3</sub> <small>(7667-37-2)</small>                      | <u>hydrogen nitrate</u>            |
| 15. Cu(NO <sub>3</sub> ) <sub>2</sub>  | <u>copper (II) nitrate</u>         | 30. Cu <sub>2</sub> SO <sub>3</sub> <small>(10041-4)</small>         | <u>copper (I) sulphite</u>         |

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## FORMULA #5

### A. Name the following compounds

1.  $\text{SrF}_2$  [7783-48-4] strontium fluoride
2.  $\text{LiH}$  lithium hydride
3.  $\text{AlBr}_3$  [7707-15-2] aluminum bromide
4.  $\text{CaO}$  calcium oxide
5.  $(\text{NH}_4)_2\text{S}$  [12135-76-1] ammonium sulphide
6.  $\text{Zn}_3\text{P}_2$  [1314-84-7] zinc phosphide
7.  $\text{MgCrO}_4$  [13423-41-5] magnesium chromate
8.  $\text{SrSO}_4$  [7758-02-4] strontium sulphate
9.  $\text{Na}_2\text{CO}_3$  [497-19-8] sodium carbonate
10.  $\text{PbBr}_2$  [10301-02-4] lead (II) bromide
11.  $\text{SnS}$  [1314-85-0] tin (II) sulphide
12.  $\text{Cu}_2\text{S}$  copper (I) sulphide
13.  $\text{SnO}_2$  tin (IV) oxide
14.  $\text{AuCl}_3$  [13453-07-1] gold (III) chloride
15.  $\text{Zn}(\text{OH})_2$  [20427-58-1] zinc hydroxide
16.  $\text{AgClO}_4$  [7783-93-9] silver perchlorate
17.  $\text{CuSO}_4$  copper (II) sulphate
18.  $\text{Fe}(\text{CH}_3\text{COO})_3$  [no CAS] iron (III) acetate
19.  $\text{HgCrO}_4$  mercury (II) chromate
20.  $\text{K}_2\text{Cr}_2\text{O}_7$  [7778-90-8] potassium dichromate
21.  $\text{Sn}(\text{OH})_2$  [12026-04-3] tin (II) hydroxide
22.  $\text{Pb}(\text{ClO}_4)_2$  [13637-76-4] lead (II) perchlorate
23.  $\text{Cr}_2(\text{SO}_3)_3$  [no CAS] chromium (III) sulphite
24.  $\text{Cu}_2\text{CO}_3$  [no CAS] copper (I) carbonate
25.  $\text{Ba}(\text{NO}_3)_2$  barium nitrate

### B. Write the formulae for the following compounds

1. silver bromide [7783-23-1] AgBr
2. hydrogen telluride [7783-09-7]  $\text{H}_2\text{Te}$
3. potassium chloride KCl
4. lithium cyanide [2408-36-8] LiCN
5. strontium sulphide [1314-86-1] SrS
6. calcium acetate [82-04-4]  $\text{Ca}(\text{CH}_3\text{COO})_2$
7. aluminum nitrate [13473-00-0]  $\text{Al}(\text{NO}_3)_3$
8. cobalt (II) sulphite [no CAS]  $\text{CoSO}_3$
9. potassium bisulphite [13041-6]  $\text{KHSO}_3$
10. iron (II) bromide [7789-48-0]  $\text{FeBr}_2$
11. cobalt (III) sulphide  $\text{Co}_2\text{S}_3$
12. copper (I) iodide [7787-05-4] CuI
13. ammonium sulphide  $(\text{NH}_4)_2\text{S}$
14. gold (III) iodide [13453-04-2]  $\text{AuI}_3$
15. lead (II) hydroxide [13181-14-1]  $\text{Pb}(\text{OH})_2$
16. nickel (II) chlorate [no CAS]  $\text{Ni}(\text{ClO}_3)_2$
17. cobalt (II) nitrate  $\text{Co}(\text{NO}_3)_2$
18. calcium nitrate  $\text{Ca}(\text{NO}_3)_2$
19. lead (II) cyanide [1392-05-2]  $\text{Pb}(\text{CN})_2$
20. manganese (II) sulphate  $\text{MgSO}_4$
21. nickel (II) hydroxide [12054-48-7]  $\text{Ni}(\text{OH})_2$
22. phosphorus tribromide [7782-84-1]  $\text{PBr}_3$
23. molybdenum (VI) oxide [13131-27-0]  $\text{MoO}_3$
24. arsenic pentafluoride [7782-86-3]  $\text{AsF}_5$
25. cobalt (II) carbonate [no CAS]  $\text{CoCO}_3$

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## FORMULA #6

### A. Name the following compounds

- |                                |                             |                                   |                                  |                             |                                     |
|--------------------------------|-----------------------------|-----------------------------------|----------------------------------|-----------------------------|-------------------------------------|
| 1. $\text{NH}_4\text{HSO}_3$   | <small>(10190-30-0)</small> | <u>ammonium hydrogen sulphite</u> | 11. $\text{KHCO}_3$              | <small>(298-14-0)</small>   | <u>potassium hydrogen carbonate</u> |
| 2. $\text{CuBr}_2$             | <small>(7789-45-8)</small>  | <u>copper (II) bromide</u>        | 12. $\text{CuSe}$                | <small>(13317-41-5)</small> | <u>copper (II) selenide</u>         |
| 3. $\text{CaCrO}_4$            | <small>(13765-19-0)</small> | <u>calcium chromate</u>           | 13. $\text{PbCrO}_4$             | <small>(7759-97-4)</small>  | <u>lead (IV) chromate</u>           |
| 4. $\text{NH}_4\text{NO}_2$    | <small>(13445-48-2)</small> | <u>ammonium nitrite</u>           | 14. $\text{CuSO}_3$              | <small>(no CAS)</small>     | <u>copper (II) sulphite</u>         |
| 5. $\text{Ba}(\text{ClO}_4)_2$ | <small>(13465-95-7)</small> | <u>barium perchlorate</u>         | 15. $\text{Mg}_3\text{N}_2$      | <small>(12057-71-5)</small> | <u>magnesium nitride</u>            |
| 6. $\text{NaClO}_2$            | <small>(7758-19-2)</small>  | <u>sodium chlorite</u>            | 16. $\text{FeF}_2$               | <small>(1303-58-8)</small>  | <u>iron (II) fluoride</u>           |
| 7. $\text{SnI}_4$              | <small>(7789-47-8)</small>  | <u>tin (IV) iodide</u>            | 17. $\text{Pb}_3(\text{PO}_4)_2$ | <small>(7446-27-7)</small>  | <u>lead (II) phosphate</u>          |
| 8. $\text{CrCl}_3$             |                             | <u>chromium (III) chloride</u>    | 18. $\text{SnBr}_2$              | <small>(10091-24-0)</small> | <u>tin (II) bromide</u>             |
| 9. $\text{MgCO}_3$             | <small>(545-93-0)</small>   | <u>magnesium carbonate</u>        | 19. $\text{Cr}_2\text{S}_3$      |                             | <u>chromium (III) sulphide</u>      |
| 10. $\text{MnO}$               |                             | <u>manganese (II) oxide</u>       | 20. $\text{Ca}_3\text{N}_2$      | <small>(12011-80-0)</small> | <u>calcium nitride</u>              |

### B. Write the formulae for the following compounds

- |                            |                             |  |                                |                             |  |
|----------------------------|-----------------------------|--|--------------------------------|-----------------------------|--|
| 1. sodium sulphide         | <small>(1311-82-2)</small>  | <u><math>\text{Na}_2\text{S}</math></u>                  | 16. potassium sulphite         | <small>(10117-38-1)</small> | <u><math>\text{K}_2\text{SO}_3</math></u>              |
| 2. iron (III) fluoride     | <small>(7783-50-8)</small>  | <u><math>\text{FeF}_3</math></u>                         | 17. gold (III) oxide           | <small>(1303-58-8)</small>  | <u><math>\text{Au}_2\text{O}_3</math></u>              |
| 3. magnesium hydride       | <small>(7693-27-8)</small>  | <u><math>\text{MgH}_2</math></u>                         | 18. calcium chlorate           | <small>(10197-94-3)</small> | <u><math>\text{Ca}(\text{ClO}_3)_2</math></u>          |
| 4. mercury (I) sulphide    |                             | <u><math>\text{Hg}_2\text{S}</math></u>                  | 19. cesium iodide              | <small>(7789-57-5)</small>  | <u><math>\text{CsI}</math></u>                         |
| 5. tin (II) phosphate      | <small>(no CAS)</small>     | <u><math>\text{Sn}_3(\text{PO}_4)_2</math></u>           | 20. lithium nitrate            | <small>(7789-49-4)</small>  | <u><math>\text{LiNO}_3</math></u>                      |
| 6. antimony pentachloride  | <small>(7647-18-0)</small>  | <u><math>\text{SbCl}_5</math></u>                        | 21. cobalt (II) chromate       | <small>(no CAS)</small>     | <u><math>\text{CoCrO}_4</math></u>                     |
| 7. copper (II) acetate     | <small>(142-71-2)</small>   | <u><math>\text{Cu}(\text{CH}_3\text{COO})_2</math></u>   | 22. tin (IV) fluoride          | <small>(7783-62-2)</small>  | <u><math>\text{SnF}_4</math></u>                       |
| 8. barium nitride          | <small>(12047-79-9)</small> | <u><math>\text{Ba}_3\text{N}_2</math></u>                | 23. cobalt (III) acetate       | <small>(917-89-1)</small>   | <u><math>\text{Co}(\text{CH}_3\text{COO})_3</math></u> |
| 9. calcium hydride         | <small>(7789-78-8)</small>  | <u><math>\text{CaH}_2</math></u>                         | 24. manganese (IV) sulphide    | <small>(no CAS)</small>     | <u><math>\text{MnS}_2</math></u>                       |
| 10. manganese (II) acetate | <small>(638-38-0)</small>   | <u><math>\text{Mn}(\text{CH}_3\text{COO})_2</math></u>   | 25. iron (III) sulphite        | <small>(no CAS)</small>     | <u><math>\text{Fe}_2(\text{SO}_3)_3</math></u>         |
| 11. cobalt (III) sulphate  | <small>(no CAS)</small>     | <u><math>\text{Co}_2(\text{SO}_4)_3</math></u>           | 26. barium cyanide             | <small>(542-62-1)</small>   | <u><math>\text{Ba}(\text{CN})_2</math></u>             |
| 12. nickel (II) nitrite    | <small>(13861-62-0)</small> | <u><math>\text{Ni}(\text{NO}_2)_2</math></u>             | 27. silver nitrite             | <small>(7783-99-5)</small>  | <u><math>\text{AgNO}_2</math></u>                      |
| 13. iron (III) dichromate  | <small>(no CAS)</small>     | <u><math>\text{Fe}_2(\text{Cr}_2\text{O}_7)_3</math></u> | 28. diphosphorus pentasulphide | <small>(13140-00-0)</small> | <u><math>\text{P}_2\text{S}_5</math></u>               |
| 14. iodine monobromide     | <small>(7789-33-5)</small>  | <u><math>\text{IBr}</math></u>                           | 29. sodium hypochlorite        | <small>(7681-52-9)</small>  | <u><math>\text{NaClO}</math></u>                       |
| 15. calcium nitrite        | <small>(13780-06-8)</small> | <u><math>\text{Ca}(\text{NO}_2)_2</math></u>             | 30. dicarbon tetrachloride     | <small>(no name)</small>    | <u><math>\text{C}_2\text{Cl}_4</math></u>              |

Date: \_\_\_\_\_

Name: \_\_\_\_\_

## FORMULA #7

### A. Name the following compounds

- |                                |                             |                            |                                  |                             |                             |
|--------------------------------|-----------------------------|----------------------------|----------------------------------|-----------------------------|-----------------------------|
| 1. $\text{NH}_4\text{HSO}_4$   | <small>[7603-43-4]</small>  | ammonium hydrogen sulphate | 11. KHS                          | <small>[99 CAS]</small>     | potassium hydrogen sulphide |
| 2. $\text{SnBr}_4$             | <small>[7789-67-5]</small>  | tin (IV) bromide           | 12. $\text{HgTe}$                | <small>[12068-90-5]</small> | mercury (II) telluride      |
| 3. $\text{MgCr}_2\text{O}_7$   | <small>[99 CAS]</small>     | magnesium dichromate       | 13. $\text{PbCl}_2$              | <small>[7738-99-4]</small>  | lead (II) chloride          |
| 4. $\text{PbF}_4$              | <small>[7783-99-7]</small>  | lead (IV) fluoride         | 14. $\text{HgSO}_3$              | <small>[99 CAS]</small>     | mercury (II) sulphite       |
| 5. $\text{Ba}(\text{ClO}_3)_2$ | <small>[13477-00-4]</small> | barium chlorate            | 15. $\text{H}_2\text{Se}$        | <small>[7783-07-5]</small>  | hydrogen selenide           |
| 6. $\text{Na}_3\text{P}$       | <small>[12058-85-4]</small> | sodium phosphide           | 16. $\text{Ca}(\text{HCO}_3)_2$  | <small>[10021-23-2]</small> | calcium hydrogen carbonate  |
| 7. $\text{CuNO}_3$             | <small>[99 CAS]</small>     | copper (I) nitrate         | 17. $\text{Sn}_3(\text{PO}_4)_2$ | <small>[99 CAS]</small>     | tin (II) phosphate          |
| 8. $\text{FeBr}_3$             | <small>[10091-39-2]</small> | iron (III) bromide         | 18. $\text{MnBr}_2$              | <small>[13446-09-2]</small> | manganese (II) bromide      |
| 9. $\text{CaCO}_3$             | <small>[473-94-1]</small>   | calcium carbonate          | 19. $\text{Fe}_2\text{S}_3$      | <small>[99 CAS]</small>     | iron (III) sulphide         |
| 10. $\text{MgO}$               | <small>[1309-48-4]</small>  | magnesium oxide            | 20. $\text{MgI}_2$               | <small>[10377-08-9]</small> | magnesium iodide            |

### B. Write the formulae for the following compounds

- |                            |                              |                                      |                             |                             |                                      |
|----------------------------|------------------------------|--------------------------------------|-----------------------------|-----------------------------|--------------------------------------|
| 1. lead (II) oxide         | <small>[1317-38-4]</small>   | $\text{PbO}$                         | 16. cobalt (II) fluoride    | <small>[10026-17-2]</small> | $\text{CoF}_2$                       |
| 2. iron (III) chloride     | <small>[7703-08-0]</small>   | $\text{FeCl}_3$                      | 17. gold (III) fluoride     | <small>[1303-58-8]</small>  | $\text{AuF}_3$                       |
| 3. chromium (II) hydride   | <small>[13960-81-9]</small>  | $\text{CrH}_2$                       | 18. calcium perchlorate     | <small>[13477-38-6]</small> | $\text{Ca}(\text{ClO}_4)_2$          |
| 4. mercury (I) oxide       | <small>[15429-53-5]</small>  | $\text{Hg}_2\text{O}$                | 19. disulphur dichloride    | <small>[15025-67-9]</small> | $\text{S}_2\text{Cl}_2$              |
| 5. strontium phosphide     | <small>[12304-14-4]</small>  | $\text{Sr}_3\text{P}_2$              | 20. sodium nitrate          | <small>[7631-89-4]</small>  | $\text{NaNO}_3$                      |
| 6. antimony (III) chloride | <small>[10025-91-9]</small>  | $\text{SbCl}_3$                      | 21. iron (II) chromate      | <small>[99 CAS]</small>     | $\text{FeCrO}_4$                     |
| 7. silver acetate          | <small>[1563-43-3]</small>   | $\text{AgCH}_3\text{COO}$            | 22. lead (IV) bromide       | <small>[13701-91-2]</small> | $\text{PbBr}_4$                      |
| 8. cadmium phosphide       | <small>[12014-28-07]</small> | $\text{Cd}_3\text{P}_2$              | 23. chromium (III) acetate  | <small>[1086-30-4]</small>  | $\text{Cr}(\text{CH}_3\text{COO})_3$ |
| 9. manganese (II) hydride  | <small>[13767-07-2]</small>  | $\text{MnH}_2$                       | 24. manganese (IV) sulphide | <small>[99 CAS]</small>     | $\text{MnS}_2$                       |
| 10. barium acetate         | <small>[1543-80-4]</small>   | $\text{Ba}(\text{CH}_3\text{COO})_2$ | 25. iron (III) sulphate     | <small>[10028-02-5]</small> | $\text{Fe}_2(\text{SO}_4)_3$         |
| 11. cobalt (III) sulphite  | <small>[99 CAS]</small>      | $\text{Co}_2(\text{SO}_3)_3$         | 26. zinc cyanide            | <small>[557-21-1]</small>   | $\text{Zn}(\text{CN})_2$             |
| 12. zinc iodide            | <small>[10139-47-6]</small>  | $\text{ZnI}_2$                       | 27. potassium nitrite       | <small>[7738-09-0]</small>  | $\text{KNO}_2$                       |
| 13. iron (III) chromate    | <small>[99 CAS]</small>      | $\text{Fe}_2(\text{CrO}_4)_3$        | 28. dinitrogen pentoxide    | <small>[10102-03-1]</small> | $\text{N}_2\text{O}_5$               |
| 14. iodine trichloride     | <small>[865-44-1]</small>    | $\text{ICl}_3$                       | 29. barium hypochlorite     | <small>[13477-50-6]</small> | $\text{Ba}(\text{ClO})_2$            |
| 15. magnesium nitrate      | <small>[10377-00-1]</small>  | $\text{Mg}(\text{NO}_3)_2$           | 30. silicon tetraiodide     | <small>[13465-84-4]</small> | $\text{SiI}_4$                       |

Date: \_\_\_\_\_

Name: \_\_\_\_\_

## FORMULA #8

### A. Name the following compounds

- LuF<sub>3</sub> (13760-81-1) lutetium fluoride
- RaCO<sub>3</sub> (7714-98-5) radium carbonate
- RuO<sub>2</sub> (12096-10-1) ruthenium (IV) oxide
- Cs<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> (13330-67-1) cesium dichromate
- Bi<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub> (7787-48-0) bismuth (III) sulphate
- TlClO<sub>3</sub> (13453-30-0) thallium (I) chlorate
- Zr(OH)<sub>4</sub> (12688-15-2) zirconium hydroxide
- Sm<sub>2</sub>O<sub>3</sub> (12060-08-1) samarium (III) oxide
- Tl(CH<sub>3</sub>COO)<sub>3</sub> (12570-61-0) thallium (III) acetate
- EuF<sub>3</sub> (13765-25-8) europium (III) fluoride
- DyCl<sub>3</sub> (10023-74-8) dysprosium chloride
- Pd(NO<sub>3</sub>)<sub>2</sub> (10102-05-1) palladium (II) nitrate
- Tb<sub>2</sub>(CO<sub>3</sub>)<sub>3</sub> (6067-34-1) terbium (III) carbonate
- CsOH (12182-83-1) cesium hydroxide
- Ce(OH)<sub>4</sub> (12014-06-1) cerium (IV) hydroxide
- PtI<sub>2</sub> (7790-39-8) platinum (II) iodide
- Th(NO<sub>3</sub>)<sub>4</sub> (13823-29-2) thorium nitrate
- NbBr<sub>5</sub> (13478-45-0) niobium (V) bromide
- Rh<sub>2</sub>O<sub>3</sub> (12096-35-0) rhodium (III) oxide
- RhO<sub>2</sub> (12137-27-8) rhodium (IV) oxide
- Ti(SO<sub>4</sub>)<sub>2</sub> (18130-44-4) titanium (IV) sulphate
- ErH<sub>3</sub> (13350-53-3) erbium hydride
- Yb<sub>2</sub>(CO<sub>3</sub>)<sub>3</sub> (5893-52-3) ytterbium (III) carbonate
- PrF<sub>3</sub> (13709-46-1) praseodymium (III) fluoride
- LaPO<sub>4</sub> (14913-14-3) lanthanum phosphate

### B. Write the formulae for the following compounds

- tungsten chloride (13283-01-7) WCl<sub>6</sub>
- molybdenum (II) iodide (14055-74-4) MoI<sub>2</sub>
- thulium (III) acetate (13016-00-4) Tm(CH<sub>3</sub>COO)<sub>3</sub>
- thallium (I) sulphate (7446-18-6) Tl<sub>2</sub>SO<sub>4</sub>
- thorium carbonate (13024-03-1) Th(CO<sub>3</sub>)<sub>2</sub>
- palladium (II) sulphate (13366-03-1) PdSO<sub>4</sub>
- niobium (V) fluoride (7783-48-8) NbF<sub>5</sub>
- holmium hydride (13338-41-8) HoH<sub>3</sub>
- platinum (IV) chloride (13454-96-1) PtCl<sub>4</sub>
- erbium perchlorate (81383-07-0) Er(ClO<sub>4</sub>)<sub>3</sub>
- rhenium (VII) oxide (13114-68-7) Re<sub>2</sub>O<sub>7</sub>
- gallium nitrate (13494-90-1) Ga(NO<sub>3</sub>)<sub>3</sub>
- iridium (III) chloride (10025-83-9) IrCl<sub>3</sub>
- iridium (IV) chloride (10025-97-1) IrCl<sub>4</sub>
- vanadium(IV) oxide (12036-01-4) VO<sub>2</sub>
- rhodium (III) iodide (13492-38-3) RhI<sub>3</sub>
- rubidium chromate (13446-73-1) Rb<sub>2</sub>CrO<sub>4</sub>
- osmium (III) chloride (13444-93-4) OsCl<sub>3</sub>
- radium hydroxide (88366-86-0) Ra(OH)<sub>2</sub>
- ruthenium (III) bromide (14014-88-1) RuBr<sub>3</sub>
- europium (III) oxide (1308-96-9) Eu<sub>2</sub>O<sub>3</sub>
- cesium acetate (13396-11-0) CsCH<sub>3</sub>COO
- cerium(III) sulphate (13454-94-9) Ce<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub>
- cerium (IV) oxide (1308-38-1) CeO<sub>2</sub>
- zirconium sulphate (14644-61-2) Zr(SO<sub>4</sub>)<sub>2</sub>