

Sweet 16 Chemistry Compound Tournament

First Round Second Round Semifinals Finals Winner
 (start by writing NEUTRAL formulas!)

Sodium acetate

Potassium thiocyanate

Potassium carbonate

Zinc (II) chloride

Ammonium sulfate

Potassium permanganate

Calcium hypochlorite

Potassium ferricyanide

Mercury (I) sulfate

Titanium (IV) oxide

Iron (III) sulfate

Sodium chlorate

Copper (I) chloride

Sodium chromate

Calcium hydroxide

Potassium phosphate

Rules

1. First Round — Write formula, most **number of atoms** in formula unit wins (Ex. NaCl has 2 atoms, CaCO₃ has 6 atoms)
2. Second Round — Greater **number of ions** in the formula unit wins (ex (NH₄)₂SO₄ has 3 ions, Fe₂(SO₄)₃ has 5 ions)
3. Semis — more negative charge on single anion wins (ex. -3 is more than -2)
4. Finals — The larger formula weight wins