Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Summer Work

Complete the word equation for the following chemical equations. Then below the word equation, write the balanced chemical equation. Indicate the type of reaction on the line to the left of the equation by classifying each reaction as single replacement (SR), double replacement (DR), decomposition (D), synthesis (S), or combustion (C).

**\_\_\_\_ 1. aluminum sulfate + calcium phosphate 🡪 aluminum phosphate + calcium phosphate**

 **\_\_\_\_ 2. magnesium chloride + silver nitrate 🡪 magnesium Nitrate + silver chloride**

 **\_\_\_\_ 3. sodium chlorate 🡪 Sodium Chloride + oxygen**

 **\_\_\_\_ 4. hydrogen gas + oxygen gas 🡪 water**

 **\_\_\_\_ 5. zinc metal + copper(II) nitrate 🡪 zinc nitrate + copper**

 **\_\_\_\_ 6. sulfurous acid, H2SO3 🡪 water + sulfur dioxide**

 **\_\_\_\_ 7. copper(II) oxide + sulfuric acid. H2SO4 🡪copper (II) sulfate + water**

**\_\_\_\_ 8. nitrogen gas + hydrogen gas 🡪 ammonia (NH3)**

 **\_\_\_\_ 9. sodium iodide + chlorine gas 🡪 sodium chloride + iodine**

 **\_\_\_\_ 10. copper(II) hydroxide 🡪 copper(II) oxide + water**

 **\_\_\_\_ 11. ammonia gas (NH3) + hydrochloric acid (HCl) 🡪 ammonium chloride (NH4Cl)**

**\_\_\_\_ 12. potassium metal + water (hint: H+OH-) 🡪 potassium hydroxide and hydrogen**

 **\_\_\_\_ 13. propane (C3H8) + oxygen 🡪 carbon dioxide and water**

**General Questions**

14) The reference tables I provide on the back side of the periodic table can tell you\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

a) the charges of polyatomic ions

b) common acids are found in Andromeda

c) uranium deposit locations in common acids

d) prefixes for common entomological specimens

e) all of the above are completely ridiculous

15) All of the elements in group 1 have an oxidation state of\_\_\_\_\_\_\_\_ .

a) negative

b) disgusted

c) plentitude

d) one

e) none of the above makes any sense

16) Roman numerals are used when naming compounds when they are composed of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

a) umbilical cord element

b) Ionic protozoa

c) Ptolemy’s principles

d) transition elements

e) The periodic Table

17) Chlorine has an oxidation state of\_\_\_\_\_\_\_\_\_\_\_\_\_ .