H/Chemistry Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Period: 1 2 3 4 5 6

Balance the following reactions by adding coefficients where necessary.

Reminders: begin by balancing elements that occur only once on each side

balance one element at a time

treat intact polyatomic ions as you do single elements

odd/even rule (i.e. multiply by 2 🡪 even number)

H + OH = H2O

1. \_\_\_\_\_\_\_\_\_PbCl2 + \_\_\_\_\_\_\_\_\_\_ Na2S 🡪 \_\_\_\_\_\_\_\_\_\_\_ PbS + \_\_\_\_\_\_\_\_\_\_ NaCl

2. \_\_\_\_\_\_\_\_\_AgNO3 + \_\_\_\_\_\_\_\_ZnCl2 🡪 \_\_\_\_\_\_\_\_\_AgCl + \_\_\_\_\_\_\_\_\_Zn(NO3)2

3. \_\_\_\_\_\_\_\_\_Al(OH)3 + \_\_\_\_\_\_\_\_\_H2SO4 🡪 \_\_\_\_\_\_\_\_\_Al2(SO4)3 + \_\_\_\_\_\_\_\_\_H2O

4. \_\_\_\_\_\_\_\_\_KI + \_\_\_\_\_\_\_\_\_\_Cl2 🡪 \_\_\_\_\_\_\_\_\_\_KCl + \_\_\_\_\_\_\_\_\_I2

5. \_\_\_\_\_\_\_\_\_AlBr3 + \_\_\_\_\_\_\_\_\_Cl2 🡪 \_\_\_\_\_\_\_\_\_\_AlCl3 + \_\_\_\_\_\_\_\_\_Br2

6. \_\_\_\_\_\_\_\_\_K + \_\_\_\_\_\_\_\_\_\_H2O 🡪 \_\_\_\_\_\_\_\_\_\_KOH + \_\_\_\_\_\_\_\_\_H2

7. \_\_\_\_\_\_\_\_Al + \_\_\_\_\_\_\_\_\_\_O2 🡪 \_\_\_\_\_\_\_\_\_\_Al2O3

8. \_\_\_\_\_\_\_\_\_NaClO3 🡪 \_\_\_\_\_\_\_\_\_\_\_NaCl + \_\_\_\_\_\_\_\_\_\_\_O2

9. \_\_\_\_\_\_\_\_\_Al + \_\_\_\_\_\_\_\_\_\_Fe2O3 🡪 \_\_\_\_\_\_\_\_\_\_Al2O3 + \_\_\_\_\_\_\_\_\_\_Fe

10. \_\_\_\_\_\_\_\_Cu(OH)2 + \_\_\_\_\_\_\_\_HC2H3O2 🡪 \_\_\_\_\_\_\_\_Cu(C2H3O2)2 + \_\_\_\_\_\_\_\_ H2O

11. \_\_\_\_\_\_\_\_Al2(SO4)3 + \_\_\_\_\_\_\_\_\_Ba(NO3)2 🡪 \_\_\_\_\_\_\_\_\_BaSO4 + \_\_\_\_\_\_\_\_\_Al(NO3)3

12. \_\_\_\_\_\_\_\_ Mg(OH)2 + \_\_\_\_\_\_ H3PO4 🡪 \_\_\_\_\_\_ Mg3(PO4)2 + \_\_\_\_\_\_H2O

13. \_\_\_\_\_\_\_\_Ca + \_\_\_\_\_\_\_\_\_\_H3PO4 🡪 \_\_\_\_\_\_\_\_\_\_Ca3(PO4)2 + \_\_\_\_\_\_\_\_\_H2

14. \_\_\_\_\_\_\_\_Na2CO3 + \_\_\_\_\_\_\_\_\_\_HCl 🡪 \_\_\_\_\_\_\_\_\_\_NaCl + \_\_\_\_\_\_\_\_\_\_H2O + \_\_\_\_\_\_CO2

15. \_\_\_\_\_\_\_\_ZnS + \_\_\_\_\_\_\_\_\_\_ O2 🡪 \_\_\_\_\_\_\_\_\_\_\_ ZnO + \_\_\_\_\_\_\_\_\_\_ SO2