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4.3 Chemical equations PRACTICE QUIZ

1. **Balance the following chemical reaction equations.**
2. \_\_\_ Na3PO4 + \_\_\_\_ KOH 🡪 \_\_\_\_ NaOH + \_\_\_\_ K3PO4
3. \_\_\_\_ MgF2 + \_\_\_\_ Li2CO3 🡪 \_\_\_\_ MgCO3 + \_\_\_\_ LiF
4. \_\_\_\_ P4 + \_\_\_\_ O2 🡪 \_\_\_\_ P2O3
5. \_\_\_\_ RbNO3 + \_\_\_\_ BeF2🡪\_\_\_\_ Be(NO3)2 + \_\_\_\_ RbF
6. \_\_\_\_ AgNO3 + \_\_\_\_ Cu 🡪 \_\_\_\_ Cu(NO3)2 + \_\_\_\_ Ag
7. \_\_\_\_ CF4 + \_\_\_\_ Br2 🡪 \_\_\_\_ CBr4 + \_\_\_\_ F2
8. \_\_\_\_ HCN + \_\_\_\_ CuSO4 🡪\_\_\_\_ H2SO4 + \_\_\_\_ Cu(CN)2
9. \_\_\_\_ GaF3 + \_\_\_\_ Cs 🡪\_\_\_\_ CsF + \_\_\_\_ Ga
10. \_\_\_\_ BaS + \_\_\_\_ PtF2🡪\_\_\_\_ BaF2 + \_\_\_\_ PtS

**2. Translate the following word equations into chemical symbols and balance the resulting equations. Also, include phases (states) for all the species.**

1. Research indicates that sulphur dioxide gas reacts with oxygen gas (O2) in the atmosphere to produce sulphur trioxide gas.
2. Solid sodium reacts with chlorine gas (Cl2) to produce solid sodium chloride.
3. Aqueous sulphuric acid (H2SO4) and gaseous ammonia form aqueous ammonium sulphate.
4. Iodine gas (I2) reacts with fluorine gas (F2) to produce gaseous iodine pentafluoride and gaseous tetraiodine difluoride.