IDENTIFYING AND BALANCING CHEMICAL REACTIONS MANHUNT

Find each equation around the room. Then use the T chart to balance the reaction, and tell me what type of reaction it is. *Hint: There are 2 of each type of reaction.*

***Write what you see on the paper. Type of Reaction***

1. **\_\_\_\_\_ Na + \_\_\_\_\_ H2O 🡪 \_\_\_\_\_ NaOH + \_\_\_\_\_ H2\_ \_\_\_\_Single displacement\_\_\_\_**

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1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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1. **\_\_\_\_\_ I2 + \_\_\_\_\_ Na2S2O3 🡪 \_\_\_\_\_ NaI + \_\_\_\_\_ Na2S4O6**
2. **\_\_\_\_\_ Mg + \_\_\_\_\_ P4 🡪 \_\_\_\_\_ Mg3P2**
3. **\_\_\_\_\_ CaCO3 🡪 \_\_\_\_\_ CaO + \_\_\_\_\_ CO2**
4. **\_\_\_\_\_ P4 + \_\_\_\_\_ O2 🡪 \_\_\_\_\_ P4O10**
5. **\_\_\_\_\_ Na3PO4 + \_\_\_\_\_ KOH 🡪 \_\_\_\_\_ NaOH + \_\_\_\_\_ K3PO4**
6. **\_\_\_\_\_ C3H6 + \_\_\_\_\_ O2 🡪 \_\_\_\_\_ CO2 + \_\_\_\_\_ H2O**
7. **\_\_\_\_\_ MgI2 + \_\_\_\_\_ Mn(SO3)2 🡪 \_\_\_\_\_ MgSO3 + \_\_\_\_\_ MnI4**
8. **\_\_\_\_\_ C6H12 + \_\_\_\_\_ O2 🡪 \_\_\_\_\_ CO2 + \_\_\_\_\_ H2O**
9. **\_\_\_\_\_ HBr + \_\_\_\_\_ Ba(OH)2 🡪 \_\_\_\_\_ BaBr2 + \_\_\_\_\_ H2O**
10. **\_\_\_\_\_ Ca(OH)2 + \_\_\_\_\_ H2CO3 🡪 \_\_\_\_\_ CaCO3 + \_\_\_\_\_ H2O**
11. **\_\_\_\_\_ Al + \_\_\_\_\_ HCl 🡪 \_\_\_\_\_ AlCl3 + \_\_\_\_\_ H2**
12. **\_\_\_\_\_ NO2 🡪 \_\_\_\_\_ O2 + \_\_\_\_\_ N2**

**ANSWER KEY**

1. **\_\_\_\_\_ I2 + \_\_2\_\_\_ Na2S2O3 🡪 \_\_\_2\_\_ NaI + \_\_\_\_\_ Na2S4O6**
2. **\_\_6\_\_\_ Mg + \_\_\_\_\_ P4 🡪 \_\_2\_\_\_ Mg3P2**
3. **\_\_\_\_\_ CaCO3 🡪 \_\_\_\_\_ CaO + \_\_\_\_\_ CO2 BALANCED**
4. **\_\_\_\_\_ P4 + \_\_5\_\_\_ O2 🡪 \_\_\_\_\_ P4O10**
5. **\_\_\_\_\_ Na3PO4 + \_\_\_3\_\_ KOH 🡪 \_\_\_3\_\_ NaOH + \_\_\_\_\_ K3PO4**
6. **\_\_2\_\_\_ C3H6 + \_\_9\_\_\_ O2 🡪 \_\_6\_\_\_ CO2 + \_\_6\_\_\_ H2O**
7. **\_\_2\_\_\_ MgI2 + \_\_\_\_\_ Mn(SO3)2 🡪 \_\_2\_\_\_ MgSO3 + \_\_\_\_\_ MnI4**
8. **\_\_\_\_\_ C6H12 + \_\_9\_\_\_ O2 🡪 \_\_\_6\_\_ CO2 + \_\_6\_\_\_ H2O**
9. **\_\_2\_\_\_ HBr + \_\_\_\_\_ Ba(OH)2 🡪 \_\_\_\_\_ BaBr2 + \_\_2\_\_\_ H2O**
10. **\_\_\_\_\_ Ca(OH)2 + \_\_\_\_\_ H2CO3 🡪 \_\_\_\_\_ CaCO3 + \_\_2\_\_\_ H2O**
11. **\_\_\_2\_\_ Al + \_\_6\_\_\_ HCl 🡪 \_\_2\_\_\_ AlCl3 + \_\_3\_\_\_ H2**
12. **\_\_\_2\_\_ NO2 🡪 \_\_2\_\_\_ O2 + \_\_\_\_\_ N2**