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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | Dihydrogen monoxide | *Formula* | | Molar Mass |  | | # of Grams | 54g | | # of Moles |  | | Balance the  following Reaction  \_\_\_ N2 + \_\_\_H2 🡪 \_\_\_NH3  What type of reaction is this? | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  | **2Al** | **+** | **3Cu(SO4)** | **🡪** | **Al2(SO4)3** | **+** | **3Cu** | | **Molar Mass** |  |  |  |  |  |  |  | | **# of Moles** |  |  |  |  |  |  |  | | **# of grams** |  |  |  |  | 100g |  |  | |
| Predict Products and then  Balance the following Reaction  \_\_\_ NaCl + \_\_\_F2 🡪  What type of reaction is this? | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  | **2C2H6** | **+** | **7O2** | **🡪** | **4CO2** | **+** | **6H2O** | | **Molar Mass** |  |  |  |  |  |  |  | | **# of Moles** |  |  |  |  |  |  |  | | **# of grams** | 12g |  |  |  |  |  |  | | |  |  | | --- | --- | | Oxygen gas | *Formula* | | Molar Mass |  | | # of Grams | 96g | | # of Moles |  | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | **2Mg** | **+** | **O2** | **🡪** | **2MgO** | | **Molar Mass** |  |  |  |  |  | | **# of Moles** |  |  |  |  |  | | **# of grams** |  |  | 20g |  |  | | |  |  | | --- | --- | | Carbon  dioxide | *Formula* | | Molar Mass |  | | # of Grams |  | | # of Moles | 0.5 mol | | Write the formulas for the skeleton equation and then balance.  *Potassium Chlorate decomposes into   Potassium Chloride and Oxygen Gas* |
| |  |  | | --- | --- | | Cobalt (III) Cyanide | *Formula* | | Molar Mass |  | | # of Grams | 50g | | # of Moles |  | | Balance the  following Reaction  \_\_\_ O2 + \_\_\_H2 🡪 \_\_\_H2O  What type of reaction is this? | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  | **2Fe** | **+** | **SnCl4** | **🡪** | **2FeCl2** | **+** | **Sn** | | **Molar Mass** |  |  |  |  |  |  |  | | **# of Moles** |  |  |  |  |  |  |  | | **# of grams** |  |  |  |  | 10g |  |  | |
| Balance  the following Reaction  \_\_\_ H2CO3 🡪 \_\_\_H2O + \_\_\_CO2  What type of reaction is this? | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  | **2C6H14** | **+** | **19O2** | **🡪** | **12CO2** | **+** | **14H2O** | | **Molar Mass** |  |  |  |  |  |  |  | | **# of Moles** |  |  |  |  |  |  |  | | **# of grams** | 8g |  |  |  |  |  |  | | |  |  | | --- | --- | | Sulfur  trioxide | *Formula* | | Molar Mass |  | | # of Grams | 30g | | # of Moles |  | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | **P4** | **+** | **5O2** | **🡪** | **2P4O10** | | **Molar Mass** |  |  |  |  |  | | **# of Moles** |  |  | 0.5 mol |  |  | | **# of grams** |  |  |  |  |  | | |  |  | | --- | --- | | Aluminum  chloride | *Formula* | | Molar Mass |  | | # of Grams |  | | # of Moles | 0.5 mol | | Write the formulas for the skeleton equation and then balance.  *Tricarbon octahydride combusts* |
| |  |  | | --- | --- | | Titanium (IV) oxide | *Formula* | | Molar Mass |  | | # of Grams | 17g | | # of Moles |  | | Balance the  following Reaction  \_\_\_ O2 + \_\_\_S8 🡪 \_\_\_SO3  What type of reaction is this? | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  | **2Cl2** | **+** | **CH4** | **🡪** | **CCl4** | **+** | **2H2** | | **Molar Mass** |  |  |  |  |  |  |  | | **# of Moles** |  |  |  |  |  |  |  | | **# of grams** |  |  |  |  | 10g |  |  | |
| Predict Products and then  Balance the following Reaction  \_\_\_ AlBr3 + \_\_\_K2SO4 🡪  What type of reaction is this? | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  | **\_\_C4H10** | **+** | **\_\_O2** | **🡪** | **\_\_CO2** | **+** | **\_\_H2O** | | **Molar Mass** |  |  |  |  |  |  |  | | **# of Moles** |  |  |  |  |  |  |  | | **# of grams** | 12g |  |  |  |  |  |  | | |  |  | | --- | --- | | Barium hydroxide | *Formula* | | Molar Mass |  | | # of Grams |  | | # of Moles | 0.75 mol | |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | **\_\_\_P4** | **+** | **\_\_\_Cl2** | **🡪** | **\_\_\_PCl5** | | **Molar Mass** |  |  |  |  |  | | **# of Moles** |  |  | 0.5 mol |  |  | | **# of grams** |  |  |  |  |  | | |  |  | | --- | --- | | Oxygen  difluoride | *Formula* | | Grams |  | | Molar Mass |  | | # Moles | 2.5 mol | | Write the formulas for the skeleton equation and then balance.  *Sodium Bicarbonate decomposes into Sodium Carbonate, Water, and Carbon Dioxide* |