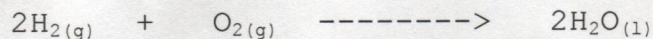


SHOW ALL WORK

1. Given the reaction,



to produce 0.600 moles of $\text{H}_2\text{O}_{(l)}$:

a.) how many moles of $\text{H}_{2(g)}$ are needed?

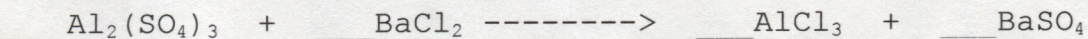
b.) how many liters of $\text{O}_{2(g)}$ are needed?

2. For the reaction,



how many moles of SO_3 liquid will be formed reacting with 2.1973×10^{20} molecules of $\text{O}_{2(g)}$?

3. If the following reaction occurs,



how many grams of barium chloride will be needed to react with 188 grams of aluminum sulfate?

4. If 78.0 liters of oxygen are consumed when a candle made from paraffin ($C_{25}H_{52}$) is burned, what volume of carbon dioxide is produced? (Water is the other product.)
5. When 4.25 moles of sodium phosphite reacts with 4.25 moles of zinc perbromate in a double replacement reaction, how many moles of sodium perbromate are produced?