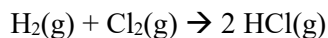


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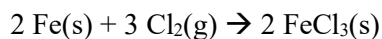
Honors: Stoichiometry of Equations

For all mole conversion problems show ALL of your work, including showing which units cancel out by putting a slash through them.

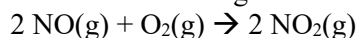
1. Calculate the number of moles of hydrogen chloride produced from 10.0 moles of hydrogen



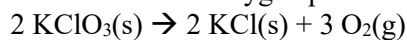
2. Calculate the number of moles of chlorine needed to form 14.0 moles of iron III chloride.



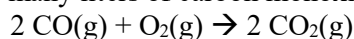
3. Calculate the number of grams of  $\text{NO}_2$  that are produced from 4.00 moles of  $\text{NO}$ .



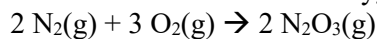
4. Calculate the moles of oxygen produced from the decomposition of 75.0 g of potassium chlorate.



5. How many liters of carbon monoxide are needed to react with 4.80 g of oxygen gas to produce carbon dioxide?



6. Calculate the number of liters of oxygen gas needed to produce 15.0 liters of nitrogen III oxide.



7. Calculate the mass of silver needed to react with chlorine to produce 84.0 grams of silver chloride. (hint: write a balanced equation first)