

## Section 14.4 Gas Stoichiometry

*In your textbook, read about gas stoichiometry.*

**Balance the following chemical equation. Then use the balanced equation to answer the questions.**



2. List at least two types of information provided by the coefficients in the equation.

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3. If 4.0 L of water vapor is produced, what volume of hydrogen reacted? What volume of oxygen?

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4. If it is known that 2 mol of hydrogen reacts, what additional information would you need to know to find the volume of oxygen that would react with it?

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5. List the steps you would use to find the mass of oxygen that would react with a known number of moles of hydrogen.

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6. Find the mass of water produced from 4.00 L  $\text{H}_2$  at STP if all of it reacts. Show your work.