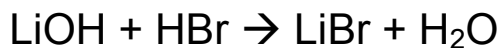


Name _____ Date _____ Period _____

Stoichiometry #3

Show all your work. Be sure to use the correct unit and number of significant figures.



1. If you start with 10.0 grams of lithium hydroxide, how many grams of lithium bromide will be produced?
2. If you start with 5 moles of HBr, how many moles of H₂O will be produced?
3. If 46.7 grams of lithium bromide are produced, how many moles of lithium hydroxide were used?



4. How many moles of ammonia (NH₃) are produced when 89.6 L of hydrogen are used in the above reaction?
5. How many moles of nitrogen gas are needed to react with 44.8 L of hydrogen gas?
6. What mass of nitrogen gas is needed to form 125 grams of ammonia?

Hydrochloric acid reacts with sodium sulfate to yield sodium chloride and sulfuric acid (also called hydrogen sulfate).

7. How many moles of sodium chloride will be produced if you start with 91.2 moles of sodium sulfate?
8. If you start with 20 grams of hydrochloric acid, how many grams of sulfuric acid (H₂SO₄) will be produced?
9. How many moles of sodium sulfate are needed to react with 34.5 grams of HCl?