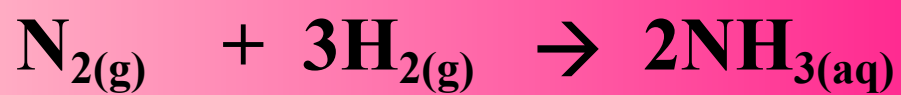


Stoich	Energy, Gas	Acid Bases	Mixtures	Rxn Rates
\$100	\$100	\$100	\$100	\$100
\$200	\$200	\$200	\$200	\$200
\$300	\$300	\$300	\$300	\$300
\$400	\$400	\$400	\$400	\$400
\$500	\$500	\$500	\$500	\$500





1. What is the molar ratio of H₂ to NH₃?



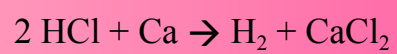
Gameboard

How many moles of iron are produced when 1.8 mol of FeO reacts?



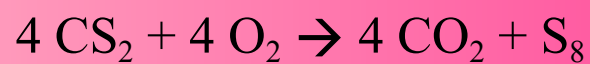
Gameboard

1. If 10.0 moles of hydrochloric acid (HCl) reacts, how many moles of hydrogen gas are produced?



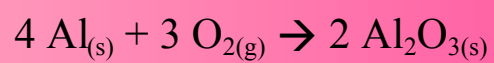
Gameboard

1. If 50 moles of sulfur are produced, how many grams of oxygen react?



Gameboard

1. How many grams of aluminum are needed to react to form 25g of aluminum oxide?



Gameboard

1. How many moles of gas are in a 15 L sample collected at 298K and 5.5atm?

Gameboard

1. Find the new volume when a 5.1 L sample of a gas collected at 298K and 2.6atm is changed to 273K and 1.3 atm.



Gameboard

How many moles is 22.4 L of CO₂ gas at STP?

Gameboard

Gas A: 1.0 mol in a .5 L container at 298K

Gas B: 2.0 mol in a 4.0 L container at 298 K

The two gases must have equal...

- a. pressures
- b. volumes
- c. average kinetic energies
- d. number of molecules

Gameboard

The pressure of a sample of helium is 4.0 atm in a 200 mL container. If volume is compressed to 50 mL without changing the temperature, what is the new pressure?

Gameboard

1. 3 properties of an acid are ...

3 properties of a base are ...

Gameboard

1. Calculate the pH of 5.0×10^{-2} solution of HCl.

Gameboard

1. By definition, an acid...
 - a. a. dissociates into OH^- ions
 - b. dissociates into H^+ ions

Gameboard

Daily Double

QUESTION

How can you differentiate between acids & bases (definitions, properties, chemical formulas)?

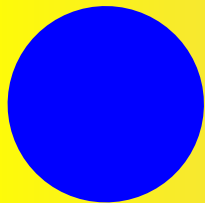
Gameboard



Daily Double

Why is salt added to the ice when making ice cream?

Would Lithium Chloride also work as well? What about sucrose? Explain why.

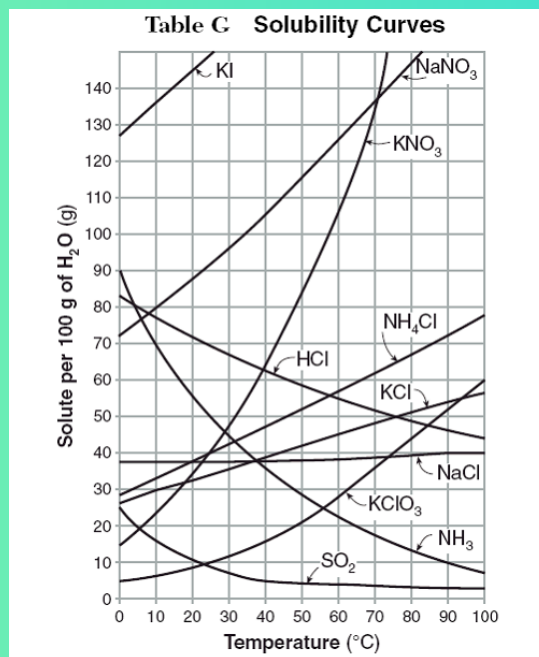


Gameboard

1. Calculate the molarity of a solution if 5.0 mol of NaCl dissolve in 1500mL of solution.

Gameboard

1. What is the maximum number of grams of HCl that will dissolve in 100 grams of water at 50°C?



Gameboard

Describe the difference between a solution, suspension, and colloid and list an example of each

Gameboard

Calculate the molarity of a solution when 1.0 mole dissolves in 4.0 Liters of water.

Gameboard

Name the two conditions for chemical reaction

Gameboard

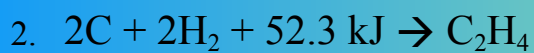
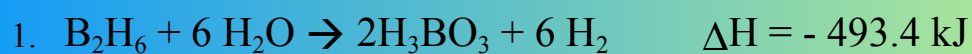
1. What is the most common source of energy for heating?

What are three alternatives ?

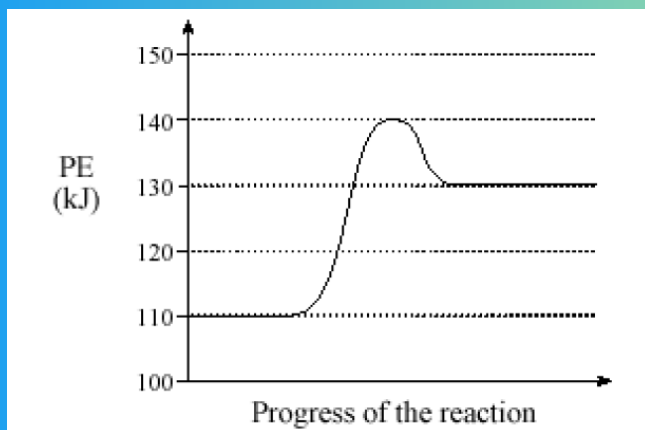
Which do you think is best? Explain

Gameboard

classify the following reactions as endothermic or exothermic



4.



Gameboard

Describe 3 factors that affect reaction rate and describe an example of each.



Gameboard

1. What factor explains why powdered sugar dissolves more quickly than granulated sugar?



Gameboard

Gameboard