



## Section 6.2

# Factors Affecting the Rate of Chemical Reactions

## Study Notes

By the end of section 4.1 you should be able to understand the following:

- By understanding the factors that influence reaction rates, chemists can stop, start, speed up or slow down chemical reactions.
- The four main factors that affect the rate of chemical reactions are temperature, surface area, concentration and the presence of a catalyst.

### NOTES

What is a definition for the "rate of reaction"?

1.

What are the four factors that influence reaction rate?

1.

2.

3.

4.

How does temperature affect reaction rate? Give an example where changing the temperature affects the rate of a reaction.

1.

2.

**Do the Reading Check on page 274**

## NOTES

How does concentration affect reaction rate? Give an example where changing the concentration affects the rate of a reaction.

1.

2.

How does surface area affect reaction rate? Give an example where changing the surface area affects the rate of a reaction.

1.

2.

How does a catalyst affect reaction rate? Give an example where adding a catalyst affects the rate of a reaction. Why would it sometimes be wise to use a catalyst to increase the rate of reaction instead of increasing the temperature or concentration of the reactants?

1.

2.

3.

What is a catalytic converter?

1.

**Do the Reading Check on page 276**