

## Collision Theory: Quizziz Live Lesson Questions

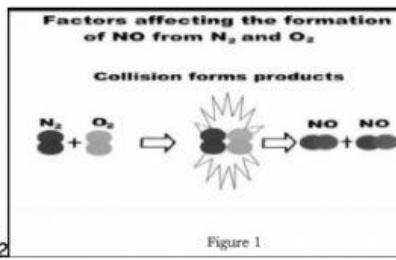
What is it?

Collision Theory



Starts on Slide: 28

1. According to the collision theory, reacting substances must come in contact ( \_\_\_\_\_ ) with enough activation energy, and in the correct \_\_\_\_\_ (facing the correct way), so that their electron shells can rearrange to form the \_\_\_\_\_ of the reaction.
2. **Slide 30:** The two factors that determine whether a reaction will occur between two particles that are colliding:
  - Substances or particles of reactions must \_\_\_\_\_ collide with enough energy.
  - Substance or particles must come into contact or collide in the \_\_\_\_\_ orientation (facing the correct way)



3. **Slide 32:** Collision of N<sub>2</sub> and O<sub>2</sub>

The shared atoms form a

\_\_\_\_\_ by completing the valence shells of both atoms.

4. **Slide 33:** As shown in figure 2, a chemical reaction does \_\_\_\_\_ take place if the collision between molecules does not have sufficient energy to break the bonds in the reactants and if the molecules are not properly aligned.

5. **Slide 35:** When two particles collide, sometimes a chemical reaction can occur, which means the bonds between two or more particles are broken and \_\_\_\_\_, creating one or more new substances.

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6. **Slide 38:** The particles must collide with enough energy to break their chemical bonds. The amount of energy that must be available for a reaction to occur is often referred to as the \_\_\_\_\_. It is the measure of the change in the concentration of the reactants or products.

7. **Slide 41:** Factors Affecting the Rate of Chemical Reaction

- \_\_\_\_\_
- Temperature
- Concentration
- \_\_\_\_\_ and Particle Size

8. **Slide 45:** Arrange the following samples according to the rate of solubility of sugar. (1 - fastest, 3-slowest)



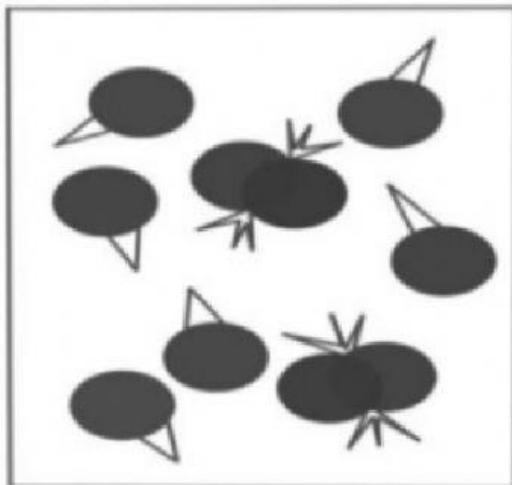
Cold water



Hot water



Tap water



9. **Slide 48:**

