Name _____

Hot or Cold? How Temperature Affects the Speed of Chemical Reactions

Multiple Choice Questions

1. What does temperature measure in a substance?

a) The number of particles

b) The average kinetic energy of particles

c) The color of particles

d) The weight of particles

2. How does increasing temperature affect the speed of chemical reactions?

a) It has no effect.

b) It slows them down.

c) It speeds them up.

d) It changes their color.

3. According to the collision theory, what is required for a chemical reaction to occur?

a) Particles must collide with sufficient energy and in the correct orientation.

b) Particles must collide with a lot of force.

c) Particles must collide in a vacuum.

d) Particles must collide with the same speed.

4. What is the reaction's optimum temperature?

a) The highest possible temperature

b) The lowest possible temperature

c) The ideal temperature range for the most efficient reaction

d) The temperature at which reactions stop completely

5. How can temperature impact the safety of a chemical reaction?

a) It has no impact on safety.

b) It can make reactions less efficient.

c) It can lead to unexpected results in temperature-sensitive reactions.

d) It only affects reactions in laboratories.