

**Task**

Look at the factors that affect the rate of reaction in the first column. Decide how each factor affects the rate of reaction and fill in the rest of the table.

Factor	Effect on reaction rate	Explanation
Increasing temperature	Increases rate	Particles gain more kinetic energy. Particles move faster and collide more often and with more energy.
Decreasing temperature		
Higher concentration of reactant		
Smaller surface area		
Reduced pressure		
Catalyst added		

## Answers

Factor	Effect on reaction rate	Explanation
Increasing temperature	Increases rate	Particles gain more kinetic energy. Particles move faster and collide more often and with more energy.
Decreasing temperature	Decreases rate	Particles have less kinetic energy. Particles move slower and collide less often and with less energy.
Higher concentration of reactant	Increases rate	There is more chance of successful collisions between reactants.
Smaller surface area	Decrease rate	Less surface area for collisions to occur on.
Reduced pressure	Decreases rate	There is less chance of successful collisions between reactants.
Catalyst added	Increases rate	The catalyst provides a different route for the reaction, with a lower activation energy.