

- 16** Aqueous sodium thiosulfate, $\text{Na}_2\text{S}_2\text{O}_3$, reacts with dilute hydrochloric acid to form a yellow precipitate of sulfur.



The precipitate forms more quickly when the reactants are heated.

Which statements explain this observation?

- 1 The reacting particles collide more frequently.
- 2 The collisions between reacting particles have more energy.
- 3 The activation energy of the reaction is lower.

A 1 and 2

B 1 and 3

C 1 only

D 2 and 3