

1. Which of these factors will speed up a chemical reaction?

- A ☐ Decreasing the temperature of the reaction
- B ☐ Decreasing the particle size of reactants
- C ☐ Decreasing the concentration of reactants

2. Cutting potatoes into smaller pieces makes them cook faster when they are boiled.

Which of the following correctly explains why this happens?

- A ☐ The smaller potatoes have a larger surface area
- B ☐ The smaller potatoes cook at a higher temperature
- C ☐ The knife acts as a catalyst in the reaction

3. Which of the following reactions would be the slowest?

- A ☐ 0.5 mol/l hydrochloric acid reacting with zinc powder
- B ☐ 1 mol/l hydrochloric acid with zinc powder
- C ☐ 0.5 mol/l hydrochloric acid reacting with a lump of zinc

4. Which change doesn't increase the speed (rate) of a chemical reaction
- A increasing the temperature
 - B increasing the particle size
 - C increasing the concentration
5. Which change has no effect on the speed (rate) of a chemical reaction
- A Increasing the volume of acid
 - B Decreasing the concentration of acid
 - C increasing the temperature of the acid
6. You can change the concentration of a thiosulfate solution
- A by changing the volume of water added
 - B by adding salt
 - C by shining light on it

7. A catalyst is a substance which

- A slows down a chemical reaction
- B speeds up a chemical reaction
- C has no effect on the speed of a reaction

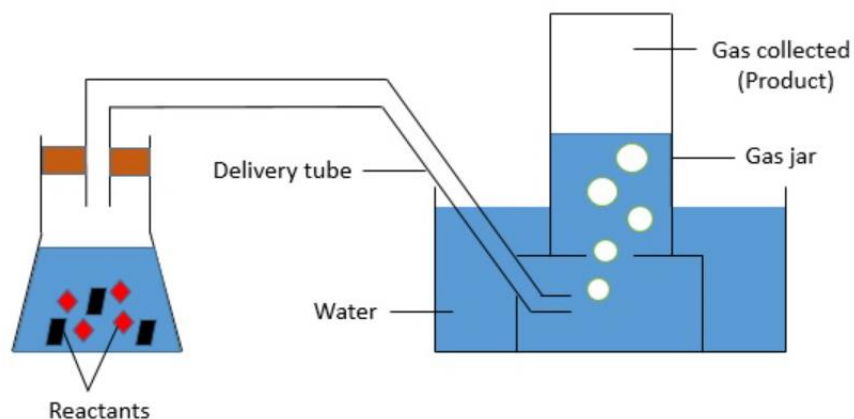
8. A catalyst is a substance which

- A changes colour in the chemical reaction
- B is not used by the reaction and can be recovered
- C gives off a gas during the chemical reaction

9. An everyday example of a catalyst is

- A transition metals in an car exhaust
- B drying beads in a biscuit tin
- C salt melting ice

10.



The apparatus above is a method of collecting a gas over water.
For this method of gas collection the gas

- A must be soluble in water
- B must be insoluble in water
- C have a colour and a smell