

Rates of reaction – true or false quiz

Use your knowledge about chemical reactions to answer the questions.

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Q1

True or false? Collision theory states that particles must collide with enough energy in order to react.

TRUE

If the particles don't have enough energy, they don't react.

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Q2

True or false? The minimum amount of energy required for a successful collision is called the starter energy.

FALSE

It is called the **ACTIVATION ENERGY**.

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Q3

True or false? During a reaction a catalyst gets used up and has to be replaced each time.

FALSE

The catalyst in a reaction does not get used up and can be used over and over again!

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Q4

Increasing the pressure of gases in a reaction will increase the rate of reaction. True or false?

TRUE

The higher the pressure, the closer together the particles are and the more collisions take place.

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Q5

Increasing the temperature of reactants increases the number of particles in the reaction. True or false?

FALSE

Increasing the temperature increases the speed of the particles. Moving faster means there are more successful collisions.

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Q6

True or false? Different catalysts are needed for different reactions.

TRUE

Catalysts are SPECIFIC and different catalysts work for different reactions.

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Q7

There are five main factors that affect the rate of reaction. True or false?

FALSE

There are FOUR main things that affect the rate of reaction: TEMPERATURE, SURFACE AREA, CATALYSTS and CONCENTRATION (pressure in gases is the same as concentration in liquids).

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Q8

Measuring the gas produced, the mass lost or the light transmitted are all ways of measuring the rate of reaction. True or false?

TRUE

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Q9

True or false? For every 10°C temperature increase, the rate of reaction triples.

FALSE

For every 10°C increase, the rate of reaction roughly doubles.

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Q10

Catalysts are usually cheap transition metals. True or false?

FALSE

Catalysts are often very expensive because they are made of precious metals.

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