QUEBEC CHEMISTRY, SECONDARY V · UNIT C · 25 QUESTIONS

Reaction Rate — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A reaction produces 60 cm³ of gas in 30 seconds. Its mean rate, in cm³ per second, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A reactant has a half life of 10 minutes. Starting with 80 grams, after 20 minutes the mass remaining, in grams, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **A reaction rate is 0.04 moles per litre per second. In 50 seconds the concentration change, in moles per litre, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **The concentration of a reactant falls by 0.4 moles per litre in 20 seconds. The mean reaction rate, in moles per litre per second, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **A clock reaction changes colour suddenly when a reactant is used up, marking the reaction**

A mass

B volume

C time

D temperature

Understand It with Pulse | Flag a mistake

6 **The slope of a concentration-time relationship is steepest when the rate is**

A highest

B lowest

C zero

D constant

Understand It with Pulse | Flag a mistake

7 **A reaction that is zero order in a reactant has a rate independent of that reactants**

A temperature

B catalyst

C volume

D concentration

Understand It with Pulse | Flag a mistake

8 **An ineffective collision is one where particles collide without enough**

A mass

B energy

C colour

D charge

Understand It with Pulse | Flag a mistake

9 **An inhibitor is a substance that**

A speeds a reaction

B slows a reaction

C heats a reaction

D colours a reaction

Understand It with Pulse | Flag a mistake

10 **As a reaction proceeds the rate usually decreases because reactant concentration**

A rises

B stays constant

C vanishes instantly

D falls

Understand It with Pulse | Flag a mistake

11 **Collision theory states that particles must collide with enough energy and the correct**

A orientation

B colour

C mass

D charge

Understand It with Pulse | Flag a mistake

12 **Enzymes are biological catalysts made of**

- A salt
- B sugar only
- C protein
- D fat only

Understand It with Pulse | Flag a mistake

13 **For a reaction where rate is directly proportional to concentration, doubling the concentration multiplies the rate by**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **For a reaction where rate is directly proportional to concentration, halving the concentration multiplies the rate by 0.5. The new rate is the old rate times**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **For a reaction where rate is directly proportional to concentration, tripling the concentration multiplies the rate by**

ANSWER _____

Understand It with Pulse | Flag a mistake

16 **For most reactions a temperature rise of 10 degrees Celsius roughly doubles the**

A rate

B mass

C volume

D pressure

Understand It with Pulse | Flag a mistake

17 **Increasing temperature increases reaction rate mainly because more particles have energy above the**

A melting point

B activation energy

C boiling point

D freezing point

Understand It with Pulse | Flag a mistake

18 **Increasing the concentration of a reactant usually increases the reaction rate because collisions become more**

A frequent

B rare

C elastic only

D colourful

Understand It with Pulse | Flag a mistake

19 **Increasing the surface area of a solid reactant increases the rate because more particles are**

A hidden inside

B melted

C exposed to collisions

D dissolved

Understand It with Pulse | Flag a mistake

20 **Measuring volume over time is a way to follow the rate of a reaction that produces a**

A gas

B solid only

C liquid only

D colour only

Understand It with Pulse | Flag a mistake

21 **A reaction produces 90 cm³ of gas in 45 seconds. Its mean rate, in cm³ per second, is**

ANSWER

Understand It with Pulse | Flag a mistake

22 **A reactant has a half life of 5 minutes. Starting with 100 grams, after 15 minutes the mass remaining, in grams, is**

ANSWER

Understand It with Pulse | Flag a mistake

23 **A reaction rate is 0.05 moles per litre per second. In 20 seconds the concentration change, in moles per litre, is**

ANSWER

Understand It with Pulse | Flag a mistake

24 **The concentration of a reactant falls by 0.6 moles per litre in 30 seconds. The mean reaction rate, in moles per litre per second, is**

ANSWER

Understand It with Pulse | Flag a mistake

25 **A reaction produces 120 cm³ of gas in 60 seconds. Its mean rate, in cm³ per second, is**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	2	**10.**	D	**19.**	C
2.	20	**11.**	A	**20.**	A
3.	2	**12.**	C	**21.**	2
4.	0.02	**13.**	2	**22.**	12.5
5.	C	**14.**	0.5	**23.**	1
6.	A	**15.**	3	**24.**	0.02
7.	D	**16.**	A	**25.**	2
8.	B	**17.**	B		
9.	B	**18.**	A		

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