SASKATCHEWAN SCIENCE 10 · UNIT B · 25 QUESTIONS

Chemical Reactions — 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 process that forms new substances with different properties is called**

- A chemical reaction
- B product
- C synthesis reaction
- D decomposition reaction

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2 **In a balanced equation, the total mass of reactants compared with products is**

A greater

B equal

C smaller

D zero

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3 **A substance has molar mass 18 g per mole. The amount in 36 g of it, in moles, is ____**

ANSWER _____

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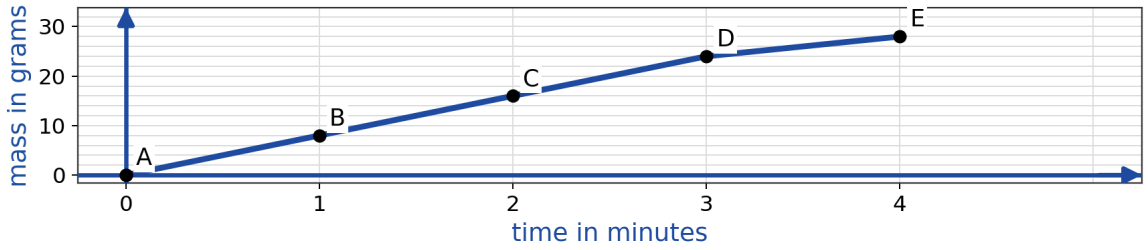
4 **The graph shows mass of product formed over time. The mass at 3 minutes, in grams, is _____**



ANSWER

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5 **A starting substance in a chemical reaction is called**

A synthesis reaction

B decomposition reaction

C reactant

D single replacement reaction

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6 **Which sign shows a chemical reaction has happened**

A a solid melts

B water evaporates

C a magnet attracts iron

D a new colour or gas forms

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7 **A substance has molar mass 44 g per mole. The amount in 88 g of it, in moles, is ____**

ANSWER _____

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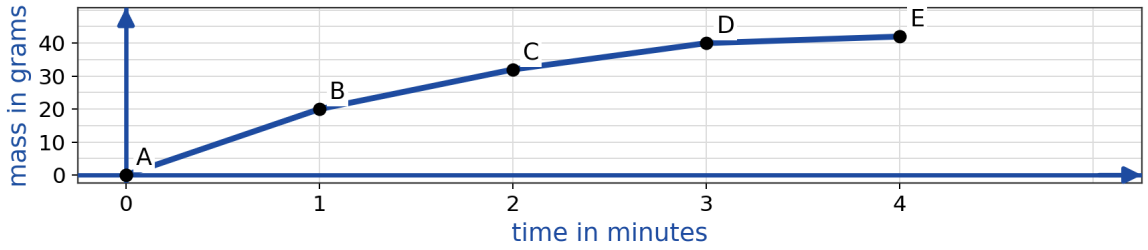
8 **The graph shows a reaction slowing down over time. The curve levels off because**



- **A** a reactant runs out
- **B** temperature keeps rising
- **C** a catalyst is added
- **D** mass is created

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9 **A substance formed in a chemical reaction is called**

- **A** decomposition reaction
- **B** product
- **C** single replacement reaction
- **D** double replacement reaction

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10 **Increasing the temperature of reactants usually makes a reaction**

A slower

B stop completely

C faster

D reverse direction

Understand It with Pulse | Flag a mistake

11 **A substance has molar mass 40 g per mole. The amount in 20 g of it, in moles, is ____**

ANSWER _____

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12 **A reaction in which two or more substances join to form one product is called**

A single replacement reaction

B double replacement reaction

C combustion reaction

D synthesis reaction

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13 **Breaking a solid reactant into powder speeds up a reaction because it increases**

A surface area

B mass

C density

D volume

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14 **A substance has molar mass 18 g per mole. The mass of 3 moles of it, in grams, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **A reaction in which one substance breaks into two or more products is called**

A double replacement reaction

B decomposition reaction

C combustion reaction

D catalyst

Understand It with Pulse | Flag a mistake

16 **The law of conservation of mass states that mass is**

A always lost as gas, escaping from the reaction so less mass remains at the end

B created by heating

C neither created nor destroyed in a reaction

D destroyed by cooling

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17 **A substance has molar mass 44 g per mole. The mass of 2 moles of it, in grams, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **A reaction in which one element replaces another in a compound is called**

A combustion reaction, burning in oxygen with flames and heat

B catalyst

C exothermic reaction

D single replacement reaction

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19 **Which type of reaction is hydrogen plus oxygen forming water**

A synthesis

B decomposition

C double replacement

D neutralization

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20 **A substance has molar mass 34 g per mole. The amount in 68 g of it, in moles, is _____**

ANSWER _____

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21 **A reaction in which two compounds exchange partners is called**

A catalyst, a substance that speeds a reaction without being used up

B exothermic reaction

C double replacement reaction

D chemical reaction

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22 **A substance has molar mass 32 g per mole. The mass of 4 moles of it, in grams, is _____**

ANSWER _____

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23 **A reaction in which a substance reacts with oxygen and releases energy is called**

A exothermic reaction

B chemical reaction

C combustion reaction

D reactant

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24 **A substance has molar mass 58.5 g per mole. The amount in 117 g of it, in moles, is ____**

ANSWER _____

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25

A substance that speeds up a reaction without being used up is called

A chemical reaction

B reactant

C product

D catalyst

Understand It with Pulse

Flag a mistake

ANSWER KEY

1. A
2. B
3. 2
4. 24
5. C
6. D
7. 2
8. A
9. B
10. C
11. 0.5
12. D
13. A
14. 54
15. B
16. C
17. 88
18. D
19. A
20. 2
21. C
22. 128
23. C
24. 2
25. D

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