SASKATCHEWAN PHYSICAL SCIENCE 20 · UNIT B · 25 QUESTIONS

Foundations of Chemistry - 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 sample of mass 50 g contains 10 g of one element. The percent by mass of that element is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **A substance has molar mass 40 g per mole. The mass of 2 moles of it, in grams, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **A base has a pH**

A less than 7

B equal to 0

C greater than 7

D equal to 7 always

Understand It with Pulse | Flag a mistake

5 **A compound differs from a mixture because its parts are**

A easily separated by filtering

B chemically joined in a fixed ratio

C not joined at all

D always gases

Understand It with Pulse | Flag a mistake

6 **A force holding atoms together in a compound is called**

- A chemical bond
- B element
- C compound
- D molecule

Understand It with Pulse | Flag a mistake

7 **A measure of how acidic or basic a solution is is called**

- A chemical bond
- B atom
- C pH
- D element

Understand It with Pulse | Flag a mistake

8 **A pure substance made of only one kind of atom is called**

A molecule

B ion

C element

D acid

Understand It with Pulse | Flag a mistake

9 **A pure substance made of two or more elements chemically joined is called**

A ion

B compound

C acid

D base

Understand It with Pulse | Flag a mistake

10 **A reaction between an acid and a base forming salt and water is called**

A atom

B element

C compound

D neutralization

Understand It with Pulse | Flag a mistake

11 **A substance that produces hydrogen ions in water is called**

A pH

B neutralization

C chemical bond

D acid

Understand It with Pulse | Flag a mistake

12 **A substance that produces hydroxide ions in water is called**

A neutralization

B base

C chemical bond

D atom

Understand It with Pulse | Flag a mistake

13 **An acid has a pH**

A greater than 7

B equal to 7

C equal to 14

D less than 7

Understand It with Pulse | Flag a mistake

14 **An atom or group of atoms with a charge is called**

A base

B ion

C pH

D neutralization

Understand It with Pulse | Flag a mistake

15 **Neutralization of an acid with a base produces**

A salt and water

B only gas

C only metal

D only acid

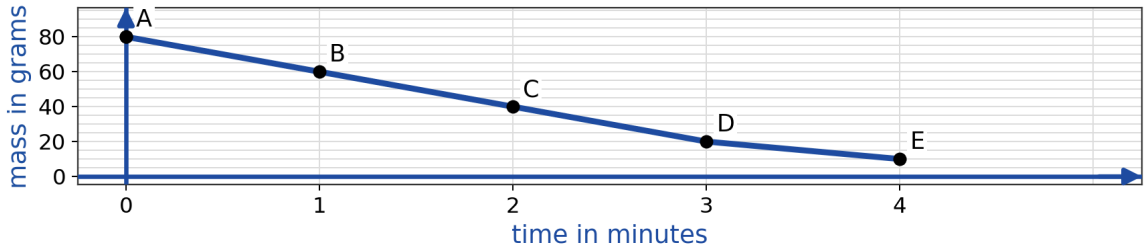
Understand It with Pulse | Flag a mistake

16 **The atomic number of an element equals its number of**

- **A** neutrons
- **B** protons
- **C** electrons + neutrons
- **D** isotopes

Understand It with Pulse | Flag a mistake

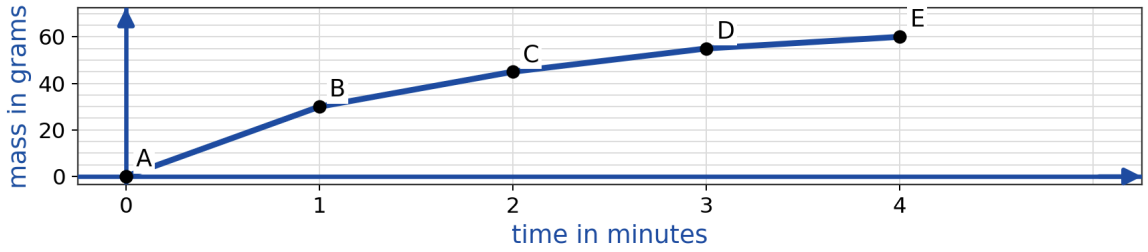
17 **The graph shows mass of reactant remaining over time. The mass at 3 minutes, in grams, is _____**



ANSWER _____

Understand It with Pulse | Flag a mistake

18 **The graph shows product forming over time. The reaction is fastest**



- **A** at the start
- **B** at the end
- **C** in the middle only
- **D** never

Understand It with Pulse | Flag a mistake

19 **The smallest unit of an element that keeps its properties is called**

- **A** atom
- **B** compound
- **C** molecule
- **D** ion

Understand It with Pulse | Flag a mistake

20 **A sample of mass 80 g contains 20 g of one element. The percent by mass of that element is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **A substance has molar mass 30 g per mole. The amount in 90 g of it, in moles, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **A substance has molar mass 30 g per mole. The mass of 3 moles of it, in grams, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **A sample of mass 120 g contains 30 g of one element. The percent by mass of that element is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **A substance has molar mass 20 g per mole. The amount in 60 g of it, in moles, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **A substance has molar mass 25 g per mole. The mass of 4 moles of it, in grams, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	20	**10.**	D	**19.**	A
2.	2	**11.**	D	**20.**	25
3.	80	**12.**	B	**21.**	3
4.	C	**13.**	D	**22.**	90
5.	B	**14.**	B	**23.**	25
6.	A	**15.**	A	**24.**	3
7.	C	**16.**	B	**25.**	100
8.	C	**17.**	20		
9.	B	**18.**	A		

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