SASKATCHEWAN PHYSICAL SCIENCE 20 · FINAL EXAM · 50 QUESTIONS

Final Exam — 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 **Convection happens in**

- A solids only
- B a vacuum
- C fluids
- D insulators only

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 18 g per mole. The mass of 3 moles of it, in grams, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **Sound is an example of a**

A transverse wave

B longitudinal wave

C surface wave only

D electromagnetic wave

Understand It with Pulse | Flag a mistake

5 **Energy transferred because of a temperature difference is called**

A specific heat capacity

B conduction

C heat

D convection

Understand It with Pulse | Flag a mistake

6 **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

7 **Actual yield divided by theoretical yield, times 100 is called**

- A percent yield
- B molecular formula
- C balanced equation
- D mole

Understand It with Pulse | Flag a mistake

8 **Light is an example of a**

A longitudinal wave

B sound wave

C water wave only

D transverse wave

Understand It with Pulse | Flag a mistake

9 **Water has a high specific heat capacity, so it**

A warms very quickly

B boils at room temperature

C never freezes

D warms and cools slowly

Understand It with Pulse | Flag a mistake

10 **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

11 **Percent yield is found from**

- A theoretical over actual only
- B actual yield over theoretical yield
- C mass over volume
- D moles over mass

Understand It with Pulse | Flag a mistake

12 **The number of waves passing a point per second is called**

A transverse wave

B frequency

C longitudinal wave

D reflection

Understand It with Pulse | Flag a mistake

13 **Water of mass 50 g warms by 20 degrees Celsius . Using c = 4.19 J per gram per degree Celsius , the heat absorbed , in joules , is ____**

ANSWER _____

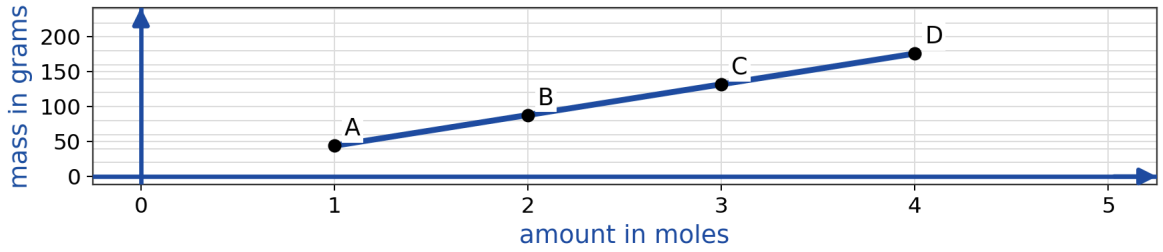
Understand It with Pulse | Flag a mistake

14 **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

15 **The graph shows mass against amount for carbon dioxide. The mass at 2 moles, in grams, is _____**



ANSWER _____

Understand It with Pulse | Flag a mistake

16 **The maximum displacement of a wave from its rest position is called**

A longitudinal wave

B reflection

C refraction

D amplitude

Understand It with Pulse | Flag a mistake

17 **Water of mass 100 grams warms by 10 degrees Celsius using specific heat 4.19 joules per gram per degree Celsius. The heat absorbed, in joules, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **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

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

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **Refraction happens because a wave**

- A stops completely
- B gains mass
- C changes speed in a new medium
- D loses frequency

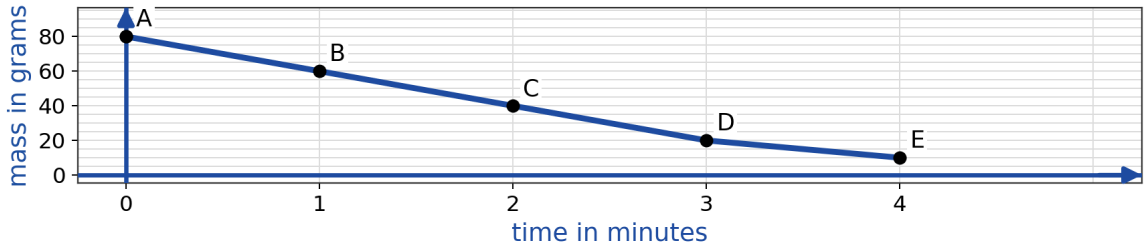
Understand It with Pulse | Flag a mistake

21 **A metal block feels colder than a wooden block at the same temperature because metal**

- A conducts heat away from your hand faster
- B is colder
- C has no heat
- D absorbs cold

Understand It with Pulse | Flag a mistake

22 **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

23 **A substance has molar mass 24 g per mole. The amount in 48 g of it, in moles, is _____**

ANSWER

Understand It with Pulse | Flag a mistake

24 **The unit of frequency is the**

A hertz

B metre

C second

D joule

Understand It with Pulse | Flag a mistake

25 **Heat transfer by electromagnetic waves is called**

A kinetic energy

B radiation

C insulator

D temperature

Understand It with Pulse | Flag a mistake

26 **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

27 **A substance has molar mass 17 g per mole. The amount in 68 g of it, in moles, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

28 **A wave has frequency 25 Hz and wavelength 4 m. Its speed, in metres per second, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

29 **A student heats 200 grams of water from 20 degrees to 30 degrees. Using 4.19 joules per gram per degree, the heat needed, in joules, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

30 **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

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

ANSWER _____

Understand It with Pulse | Flag a mistake

32 **A wave has frequency 12 Hz and wavelength 6 m. Its speed, in metres per second, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

33 **A material that does not conduct heat well is called**

A insulator

B heat

C thermal energy

D specific heat capacity

Understand It with Pulse | Flag a mistake

34 **A substance has molar mass 40 g per mole. The amount in 120 g of it, in moles, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

35 **A substance has molar mass 32 g per mole. The amount in 32 g of it, in moles, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

36 **A wave has frequency 30 Hz and wavelength 3 m. Its speed, in metres per second, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

37 **Water of mass 400 g warms by 5 degrees Celsius . Using c = 4.19 J per gram per degree Celsius , the heat absorbed , in joules , is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

38 **A substance has molar mass 25 g per mole. The amount in 75 g of it, in moles, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

39 **A substance has molar mass 100 g per mole. The mass of 2 moles of it, in grams, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

40 **A wave has period 0.25 s. Its frequency, in hertz, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

41 **Water of mass 220 g warms by 7 degrees Celsius . Using c = 4.19 J per gram per degree Celsius , the heat absorbed , in joules , is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

42 **A sample of mass 75 g contains 15 g of one element. The percent by mass of that element is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

43 **6.02×10^{23} particles per mole is called**

- A Avogadro number
- B limiting reactant
- C excess reactant
- D percent yield

Understand It with Pulse | Flag a mistake

44 **A wave travels at 120 m per second with wavelength 6 m. Its frequency, in hertz, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

45 **Water of mass 350 g warms by 4 degrees Celsius . Using c = 4.19 J per gram per degree Celsius , the heat absorbed , in joules , is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

46 **A substance has molar mass 30 g per mole. The amount in 150 g of it, in moles, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

47 **A substance has molar mass 58.5 g per mole. The mass of 3 moles of it, in grams, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

48 **A wave has period 0.2 s. Its frequency, in hertz, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

49 **Water of mass 110 g warms by 20 degrees Celsius . Using c = 4.19 J per gram per degree Celsius , the heat absorbed , in joules , is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

50 **A substance has molar mass 40 g per mole. The mass of 4 moles of it, in grams, is ____**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	C	**18.**	B	**35.**	1
2.	2	**19.**	2	**36.**	90
3.	54	**20.**	C	**37.**	8380
4.	B	**21.**	A	**38.**	3
5.	C	**22.**	20	**39.**	200
6.	B	**23.**	2	**40.**	4
7.	A	**24.**	A	**41.**	6452.6
8.	D	**25.**	B	**42.**	20
9.	D	**26.**	3	**43.**	A
10.	C	**27.**	4	**44.**	20
11.	B	**28.**	100	**45.**	5866
12.	B	**29.**	8380	**46.**	5
13.	4190	**30.**	3	**47.**	175.5
14.	D	**31.**	2	**48.**	5
15.	88	**32.**	72	**49.**	9218
16.	D	**33.**	A	**50.**	160
17.	4190	**34.**	3		

© 2026 Brett Robbins. All Rights Reserved.