ENGLAND GCSE CHEMISTRY EDEXCEL FOUNDATION · 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 **A thermometer is placed in hot water. What happens to the liquid inside the thermometer?**

- A it freezes
- B it expands
- C it evaporates
- D it contracts

Understand It with Pulse | Flag a mistake

2 **A swimming pool holds water. Why does a person float in the pool?**

- A their density is close to water
- B the water pushes them down
- C they are made of air
- D they are heavier than water and sink

Understand It with Pulse | Flag a mistake

3 **A cup of coffee cools down. Energy is transferred to the surroundings. What type of change is this?**

- A a chemical change
- B a reversible reaction
- C a neutralisation
- D an energy transfer

Understand It with Pulse | Flag a mistake

4 **In the Haber process, 1 mole of nitrogen reacts with 3 moles of hydrogen. How many moles of hydrogen react with 3 moles of nitrogen?**

- A 8
- B 9
- C 10
- D 18

Understand It with Pulse | Flag a mistake

5 **Hardcover books are dropped. What happens to their speed as they fall?**

A it decreases

B it increases

C it stays the same

D it becomes zero

Understand It with Pulse | Flag a mistake

6 **Hardcover books have mass. What is mass measured in?**

A kilograms

B newtons, the unit of force

C watts

D joules

Understand It with Pulse | Flag a mistake

7 **A passenger train carries people around the country. Which part of the blood is like the train, carrying oxygen around the body?**

- A plasma
- B red blood cells
- C platelets
- D white blood cells

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8 **A forest provides a habitat. What does habitat mean?**

- A what an organism eats
- B when an organism sleeps
- C how an organism breeds
- D where an organism lives

Understand It with Pulse | Flag a mistake

9

A swimming pool is heated. What happens to the water particles?

A they get smaller

B they stop moving

C they move faster

D they disappear

Understand It with Pulse | Flag a mistake

10

A chocolate cake rises in the oven. What makes it rise?

A the flour melts

B the sugar freezes

C the egg evaporates

D a gas is made

Understand It with Pulse | Flag a mistake

11 **An ice cream cone melts. What is the melting point of the ice cream?**

- **A** around 37 degrees Celsius
- **B** around minus 20 degrees Celsius
- **C** around 100 degrees Celsius
- **D** around 0 degrees Celsius

Understand It with Pulse | Flag a mistake

12 **A solution has a hydrogen ion concentration of 10^{-3}mol per cubic decimetre. What is its pH?**

- **A** 4
- **B** 2
- **C** 3
- **D** 5

Understand It with Pulse | Flag a mistake

13 **What does the Haber process make?**

A nitric acid, used to make fertilisers

B ammonium nitrate, used as a fertiliser

C ammonia

D nitrogen gas for the air

Understand It with Pulse | Flag a mistake

14 **A student adds 20 cm cubed of 0.5 mol per cubic decimetre hydrochloric acid to a flask. It exactly neutralises 20 cm cubed of sodium hydroxide solution. What is the concentration of the sodium hydroxide solution?**

A 0.5 mol/dm³

B 1 mol/dm³

C 1.5 mol/dm³

D 0.25 mol/dm³

Understand It with Pulse | Flag a mistake

15 **Which noble gas is in the air in the largest amount?**

A helium, which is used in balloons

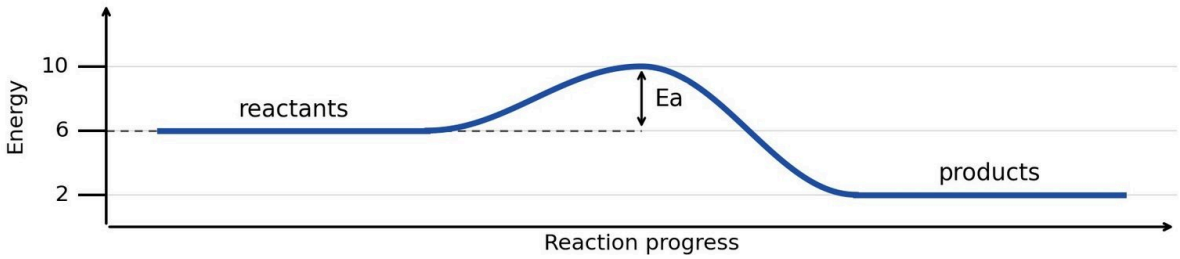
B krypton, which is used in lasers

C argon

D neon, which is used in signs

Understand It with Pulse | Flag a mistake

16 **The diagram shows the energy profile for a reaction. The reactants are at energy 6 and the products are at 2. Is the reaction exothermic or endothermic?**



A exothermic, energy is given out

B endothermic, energy is given out

C endothermic, energy is taken in

D exothermic, energy is taken in

Understand It with Pulse | Flag a mistake

17 **Oxygen is 21 percent of the air. How much oxygen is there in 100 litres of air?**

A 11 L

B 21 L

C 42 L

D 31 L

Understand It with Pulse | Flag a mistake

18 **A hot air balloon is filled with hot air. Why does it rise?**

A hot air is colder

B hot air is heavier than cold air

C hot air has no mass

D hot air is less dense

Understand It with Pulse | Flag a mistake

19 **Which of these is a typical property of a metal?**

A it is brittle

B it does not conduct heat

C it is dull

D it conducts electricity

Understand It with Pulse | Flag a mistake

20 **In a chromatogram, a spot moves 6 cm and the solvent moves 10 cm. What is the Rf value?**

A 0.75

B 0.6

C 0.7

D 1.2

Understand It with Pulse | Flag a mistake

21 **Why is cryolite added to aluminium oxide in its electrolysis?**

A it makes the aluminium purer

B it stops the carbon anodes burning

C it lowers the melting point

D it makes the reaction go faster

Understand It with Pulse | Flag a mistake

22 **What is reduction?**

A loss of oxygen

B gain of oxygen by a substance

C gain of a metal from an ore

D loss of a metal from an ore

Understand It with Pulse | Flag a mistake

23 **How many moles of solute are in 250 cm cubed of a 1 mol per cubic decimetre solution?**

- **A** 0.25 mol
- **B** 0.5 mol
- **C** 0.75 mol
- **D** 0.125 mol

Understand It with Pulse | Flag a mistake

24 **What happens to the boiling point down Group 7?**

- **A** it stays the same for all the halogens
- **B** it decreases as the atoms get larger
- **C** it increases
- **D** it increases then decreases again

Understand It with Pulse | Flag a mistake

25 **In an experiment, 20 cubic centimetres of gas are made in 20 seconds. What is the rate of the reaction?**

- A 400 cm^3/s
- B 2 cm^3/s
- C 0.5 cm^3/s
- D 1 cm^3/s

Understand It with Pulse | Flag a mistake

26 **Which alkane has the lowest boiling point?**

- A ethane
- B methane
- C propane
- D butane

Understand It with Pulse | Flag a mistake

27 **What happens if oxygen gets into a fermenting mixture?**

A the yeast respires instead

B the yeast dies at once

C the ethanol turns to vinegar at once

D the mixture boils straight away

Understand It with Pulse | Flag a mistake

28 **What is the mass number of an isotope with 6 protons and 8 neutrons?**

A 20

B 6

C 8

D 14

Understand It with Pulse | Flag a mistake

29 **How do you test for hydrogen gas?**

A it turns limewater cloudy

B it burns with a squeaky pop

C it turns damp litmus red

D it relights a glowing splint

Understand It with Pulse | Flag a mistake

30 **What is the difference between a strong acid and a weak acid?**

A a strong acid is more concentrated

B a strong acid has a higher pH

C a strong acid is always dangerous

D a strong acid is fully ionised

Understand It with Pulse | Flag a mistake

31 **What happens when zinc is added to copper sulfate solution?**

- A zinc displaces copper
- B copper displaces zinc from the solution
- C nothing happens, as zinc is less reactive
- D zinc dissolves and the solution turns blue

Understand It with Pulse | Flag a mistake

32 **What is one advantage of a hydrogen fuel cell over a petrol engine?**

- A it is cheaper to build
- B it uses petrol more efficiently
- C it never needs refuelling
- D it makes no carbon dioxide

Understand It with Pulse | Flag a mistake

33 **Hardcover books are stacked on a table. What force pulls them down?**

A air resistance

B gravity

C tension

D friction

Understand It with Pulse | Flag a mistake

34 **What is the temperature change in an exothermic reaction?**

A it falls

B it stays the same

C it rises

D it becomes zero

Understand It with Pulse | Flag a mistake

35 **What is the main greenhouse gas?**

A oxygen gas from the air

B carbon dioxide

C nitrogen gas from the air

D argon gas from the air

Understand It with Pulse | Flag a mistake

36 **Why are instrumental methods better than chemical tests?**

A they are cheap and need no training at all

B they work on solids only

C they are fast, sensitive and accurate

D they need no sample at all

Understand It with Pulse | Flag a mistake

37 **What is the charge on a chloride ion?**

- **A** Cl
- **B** Cl^{2-}
- **C** Cl^{+}
- **D** Cl^{-}

Understand It with Pulse | Flag a mistake

38 **A swimming pool is filled with water. What is the density of water?**

- **A** about 10 kilograms per cubic metre
- **B** about 1 kilogram per cubic metre
- **C** about 1000 kilograms per cubic metre
- **D** about 100 kilograms per cubic metre, roughly

Understand It with Pulse | Flag a mistake

39 **Paintbrushes apply paint to a wall. What is the paint made of?**

A a single compound, nothing else

B pure water with nothing in it

C a single element, nothing else

D a mixture of substances

Understand It with Pulse | Flag a mistake

40 **Silver coins conduct electricity well. Why?**

A they are cold

B they are shiny and reflective

C they have free electrons

D they are heavy

Understand It with Pulse | Flag a mistake

41 **What are the reactants in a hydrogen fuel cell?**

A hydrogen and carbon dioxide

B hydrogen and oxygen

C hydrogen and nitrogen

D oxygen and nitrogen

Understand It with Pulse | Flag a mistake

42 **An ice cream cone melts in the Sun. What is happening to the particles in the ice cream?**

A they lose energy and slow down a lot

B they get smaller

C they gain energy and move more

D they stop moving

Understand It with Pulse | Flag a mistake

43 **What type of reaction is in a hand warmer?**

A exothermic

B electrolysis

C neutralisation

D endothermic

Understand It with Pulse | Flag a mistake

44 **Oxygen is 21 percent of the air. How much oxygen is there in 1000 litres of air?**

A 210 L

B 200 L

C 220 L

D 420 L

Understand It with Pulse | Flag a mistake

45 **Glass marbles in a tray are used as a model for particles in a solid. What do the marbles show?**

- **A** particles are far apart from each other
- **B** particles move freely through space
- **C** particles vibrate in fixed positions
- **D** particles flow past each other easily

Understand It with Pulse | Flag a mistake

46 **Lemons taste sour. What does sour taste show?**

- **A** a salt is present
- **B** an alkali is present
- **C** an acid is present
- **D** a metal is present

Understand It with Pulse | Flag a mistake

47 **Glass marbles are used to model atoms. What is a limitation of the model?**

A marbles are much bigger than atoms

B marbles are the wrong colour for atoms

C marbles are too small to see properly

D marbles cannot be counted accurately at all

Understand It with Pulse | Flag a mistake

48 **What is the pH of a neutral solution?**

A 7

B 14

C 1

D 0

Understand It with Pulse | Flag a mistake

49 **Will zinc displace copper from copper sulfate?**

A yes, copper is more reactive

B yes, zinc is more reactive

C no, copper is more reactive

D no, zinc is less reactive

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50 **A calculator is switched on. What does the battery transfer energy to?**

A the case

B the circuits

C the buttons only

D the screen only

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ANSWER KEY

1. B
2. A
3. D
4. B
5. B
6. A
7. B
8. D
9. C
10. D
11. D
12. C
13. C
14. A
15. C
16. A
17. B
18. D
19. D
20. B
21. C
22. A
23. A
24. C
25. D
26. B
27. A
28. D
29. B
30. D
31. A
32. D
33. B
34. C
35. B
36. C
37. D
38. C
39. D
40. C
41. B
42. C
43. A
44. A
45. C
46. C
47. A
48. A
49. B
50. B

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