ENGLAND GCSE COMBINED SCIENCE AQA SYNERGY HIGHER · UNIT 1 · 25 QUESTIONS

Building Blocks — 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 so it can be fixed.

1 **Eggs can carry Salmonella bacteria. What should you do before eating eggs?**

- A leave them in the sun
- B wash them in cold water
- C cook them thoroughly
- D eat them raw

Understand It with Pulse | Flag a mistake

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

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

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

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

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

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

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5 **A sunflower turns its head to follow the Sun. What is this a response to?**

- A gravity
- B water
- C light
- D touch

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6 **A guitar string vibrates to make a sound. What type of wave is the sound wave?**

- A electromagnetic
- B standing
- C longitudinal
- D transverse

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7 **Which particle has no charge?**

A the neutron

B the nucleus

C the electron

D the proton

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8 **Potatoes are plant storage organs. What do they store?**

A starch

B glucose

C protein

D cellulose

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9 **A cell is 24 mm long in a photograph. Its real length is 60 micrometres. What is the magnification?**

- **A** × 800
- **B** × 40
- **C** × 4000
- **D** × 400

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10 **An atom has 12 protons and 10 neutrons. What is its mass number?**

- **A** 12
- **B** 24
- **C** 10
- **D** 22

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11 **Which wave has the longest wavelength in the electromagnetic spectrum?**

A X-rays

B gamma rays

C radio waves

D visible light

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12 **In which direction do particles move by diffusion?**

A from cold to hot

B from high to low concentration

C from large to small

D from low to high concentration

Understand It with Pulse | Flag a mistake

13 **A hot air balloon cools down. What happens?**

A it bursts

B it stays still

C it rises faster

D it sinks

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14 **Which part of a cell is where most of the chemical reactions happen?**

A the cell membrane

B the nucleus

C the cytoplasm

D the ribosome

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15 **Which structure is found in a bacterial cell but not in an animal cell?**

A a nucleus

B a mitochondrion

C a plasmid

D a ribosome

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16 **A body cell with 46 chromosomes divides by mitosis. How many chromosomes does each daughter cell have?**

A 12

B 92

C 46

D 23

Understand It with Pulse | Flag a mistake

17 **In osmosis, water moves from where to where?**

A cell to soil

B hot to cold water

C dilute to concentrated solution

D concentrated to dilute solution

Understand It with Pulse | Flag a mistake

18 **An object has a mass of 50 g and a volume of 10 cubic centimetres. What is its density?**

A 5 g/cm³

B 2.5 g/cm³

C 10 g/cm³

D 60 g/cm³

Understand It with Pulse | Flag a mistake

19 **What is the centre of an atom called?**

- A the electron shell
- B the proton
- C the nucleus
- D the neutron

Understand It with Pulse | Flag a mistake

20 **An atom has 6 protons and 6 neutrons. What is its mass number?**

- A 18
- B 0
- C 12
- D 6

Understand It with Pulse | Flag a mistake

21 **A cell is 18 mm long in a photograph. Its real length is 20 micrometres. What is the magnification?**

- A × 900
- B × 9000
- C × 1800
- D × 90

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22 **An atom has 11 protons and 20 neutrons. What is its mass number?**

- A 20
- B 31
- C 11
- D 33

Understand It with Pulse | Flag a mistake

23 **What is a risk of using stem cells from another person?**

- A they turn into cancer at once
- B they stop the heart
- C they cannot divide
- D the body may reject them

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24 **Which part of a plant cell gives the cell strength and support?**

- A the chloroplast
- B the cell membrane
- C the cell wall
- D the vacuole

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25 **Which cell has a cell wall made of cellulose?**

A an animal cell

B a bacterial cell

C a sperm cell

D a plant cell

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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