MANITOBA BIOLOGY 40S · 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 **An object of size 2 units seen at magnification 20 times has image size**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **An object of size 4 units seen at magnification 50 times has image size**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **An object of size 2 units seen at magnification 50 times has image size**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **An object of size 2 units seen at magnification 40 times has image size**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **A heart beats 95 times per minute. In 5 minutes it beats**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A change in the genetic material of an organism is a**

A adaptation

B variation

C selection

D mutation

Understand It with Pulse | Flag a mistake

7 **The organ that pumps blood around the body is the**

A liver

B heart

C lung

D kidney

Understand It with Pulse | Flag a mistake

8 **30 grams of fat provide energy at 9 kilocalories per gram. The energy is, in kilocalories**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 A neutral solution has a pH of

- **A** 7
- **B** 0
- **C** 14
- **D** 1

Understand It with Pulse | Flag a mistake

10 One cell divides 4 times with no cell death. The number of cells is

ANSWER _____

Understand It with Pulse | Flag a mistake

11 In a monohybrid cross of two heterozygous parents, the percent of offspring described is

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **The basic unit of life is the**

A organ

B cell

C tissue

D organism

Understand It with Pulse | Flag a mistake

13 **The chemical symbol for water is**

A CO_2

B H_2O

C O_2

D NaCl

Understand It with Pulse | Flag a mistake

14 **The process of gas changing to liquid is**

A condensation

B evaporation

C sublimation

D melting

Understand It with Pulse | Flag a mistake

15 **An acid has a pH that is**

A equal to 7

B less than 7

C greater than 7

D equal to 14

Understand It with Pulse | Flag a mistake

16 **The gas plants absorb from the air for photosynthesis is**

A oxygen

B carbon dioxide

C nitrogen

D hydrogen

Understand It with Pulse | Flag a mistake

17 **The movement of water across a partially permeable membrane is**

A osmosis

B diffusion

C active transport

D photosynthesis

Understand It with Pulse | Flag a mistake

18 **The chemical symbol for carbon dioxide is**

A H_2O

B O_2

C CO_2

D CO

Understand It with Pulse | Flag a mistake

19 **The maintenance of a stable internal environment is**

A photosynthesis

B fermentation

C osmosis

D homeostasis

Understand It with Pulse | Flag a mistake

20 **The layer of gases surrounding Earth is the**

- A lithosphere
- B hydrosphere
- C biosphere
- D atmosphere

Understand It with Pulse | Flag a mistake

21 **An object of size 8 units seen at magnification 40 times has image size**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **An object of size 2 units seen at magnification 30 times has image size**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **An object of size 8 units seen at magnification 20 times has image size**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **An object of size 8 units seen at magnification 10 times has image size**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **An object of size 6 units seen at magnification 10 times has image size**

ANSWER _____

Understand It with Pulse | Flag a mistake

26 **A heart beats 85 times per minute. In 3 minutes it beats**

ANSWER _____

Understand It with Pulse | Flag a mistake

27 **A heart beats 65 times per minute. In 3 minutes it beats**

ANSWER _____

Understand It with Pulse | Flag a mistake

28 **A population of 40 doubles 4 times. Its final size is**

ANSWER _____

Understand It with Pulse | Flag a mistake

29 **40 grams of fat provide energy at 9 kilocalories per gram. The energy is, in kilocalories**

ANSWER _____

Understand It with Pulse | Flag a mistake

30 **A heart beats 75 times per minute. In 5 minutes it beats**

ANSWER _____

Understand It with Pulse | Flag a mistake

31 **An object of size 6 units seen at magnification 50 times has image size**

ANSWER _____

Understand It with Pulse | Flag a mistake

32 **A population of 20 doubles 4 times. Its final size is**

ANSWER _____

Understand It with Pulse | Flag a mistake

33 **An object of size 6 units seen at magnification 30 times has image size**

ANSWER _____

Understand It with Pulse | Flag a mistake

34 **An object of size 6 units seen at magnification 20 times has image size**

ANSWER _____

Understand It with Pulse | Flag a mistake

35 **An object of size 4 units seen at magnification 20 times has image size**

ANSWER

Understand It with Pulse | Flag a mistake

36 **An object of size 9 units seen at magnification 50 times has image size**

ANSWER

Understand It with Pulse | Flag a mistake

37 **An object of size 3 units seen at magnification 40 times has image size**

ANSWER

Understand It with Pulse | Flag a mistake

38 **An object of size 9 units seen at magnification 30 times has image size**

ANSWER

Understand It with Pulse | Flag a mistake

39 **An object of size 9 units seen at magnification 20 times has image size**

ANSWER _____

Understand It with Pulse | Flag a mistake

40 **An object of size 7 units seen at magnification 20 times has image size**

ANSWER _____

Understand It with Pulse | Flag a mistake

41 **The organelle where photosynthesis happens in plant cells is the**

A mitochondrion

B nucleus

C chloroplast

D vacuole

Understand It with Pulse | Flag a mistake

42 **The force that pulls objects toward Earth is**

- A friction
- B magnetism
- C inertia
- D gravity

Understand It with Pulse | Flag a mistake

43 **The speed of light in a vacuum is about**

- A 150000 kilometres per second
- B 300 kilometres per second
- C 3000 kilometres per second
- D 300000 kilometres per second

Understand It with Pulse | Flag a mistake

44 **The planet closest to the Sun is**

A Venus

B Mars

C Mercury

D Earth

Understand It with Pulse | Flag a mistake

45 **The powerhouse of the cell, where energy is released, is the**

A mitochondrion

B nucleus

C ribosome

D vacuole

Understand It with Pulse | Flag a mistake

46 **The process that releases energy from food in cells is**

A photosynthesis

B cellular respiration

C osmosis

D diffusion

Understand It with Pulse | Flag a mistake

47 **An object of size 9 units seen at magnification 10 times has image size**

ANSWER _____

Understand It with Pulse | Flag a mistake

48 **The unit of voltage is the**

A ampere

B ohm

C volt

D watt

Understand It with Pulse | Flag a mistake

49 **30 grams of protein provide energy at 4 kilocalories per gram. The energy is, in kilocalories**

ANSWER _____

Understand It with Pulse | Flag a mistake

50 **The unit of force is the**

A newton

B joule

C watt

D pascal

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	40	**18.**	C	**35.**	80
2.	200	**19.**	D	**36.**	450
3.	100	**20.**	D	**37.**	120
4.	80	**21.**	320	**38.**	270
5.	475	**22.**	60	**39.**	180
6.	D	**23.**	160	**40.**	140
7.	B	**24.**	80	**41.**	C
8.	270	**25.**	60	**42.**	D
9.	A	**26.**	255	**43.**	D
10.	32	**27.**	195	**44.**	C
11.	75	**28.**	640	**45.**	A
12.	B	**29.**	360	**46.**	B
13.	B	**30.**	375	**47.**	90
14.	A	**31.**	300	**48.**	C
15.	B	**32.**	320	**49.**	120
16.	B	**33.**	180	**50.**	A
17.	A	**34.**	120		

© 2026 Brett Robbins. All Rights Reserved.