Cell Theory, Microscope Techniques, and A Closer Look at Cells — 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 cell is 20 micrometres long. At 100 times magnification its image length, in micrometres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A microscope has an eyepiece magnification of 10 times and an objective magnification of 4 times. Total magnification is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **A field of view is 2000 micrometres across at 10 times magnification. At 40 times magnification, the field width, in micrometres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **A microscope magnifies 500 times. A 2 micrometre structure appears, in micrometres, as**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **A light microscope uses visible light and lenses to**

A see atoms directly

B magnify small specimens

C measure mass

D count electrons

Understand It with Pulse | Flag a mistake

6 **A specimen 10 micrometres wide is magnified 400 times. Its image width, in micrometres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **Cell theory states that all cells come from**

A nonliving matter

B pre-existing cells

C water only

D air only

Understand It with Pulse | Flag a mistake

8 **Cell theory states that all living things are made of**

A cells

B atoms only

C organs only

D tissues only

Understand It with Pulse | Flag a mistake

9 **Chloroplasts are the site of**

A respiration

B photosynthesis

C protein synthesis

D cell division

Understand It with Pulse | Flag a mistake

10 **Increasing magnification while using the same eyepiece requires a**

A lower power objective

B smaller slide

C higher power objective

D darker room

Understand It with Pulse | Flag a mistake

11 **A cell is 50 micrometres long. At 40 times magnification its image length, in micrometres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **A microscope has an eyepiece magnification of 10 times and an objective magnification of 10 times. Total magnification is**

ANSWER _____

Understand It with Pulse | Flag a mistake

13 **A field of view is 4000 micrometres across at 10 times magnification. At 100 times magnification, the field width, in micrometres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **A microscope magnifies 250 times. A 4 micrometre structure appears, in micrometres, as**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **A cell is 25 micrometres long. At 200 times magnification its image length, in micrometres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

16 **A microscope has an eyepiece magnification of 10 times and an objective magnification of 40 times. Total magnification is**

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **A field of view is 3000 micrometres across at 10 times magnification. At 50 times magnification, the field width, in micrometres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **A cell is 40 micrometres long. At 50 times magnification its image length, in micrometres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

19 **A microscope has an eyepiece magnification of 5 times and an objective magnification of 10 times. Total magnification is**

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **A cell is 30 micrometres long. At 100 times magnification its image length, in micrometres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **A microscope has an eyepiece magnification of 10 times and an objective magnification of 20 times. Total magnification is**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **A cell is 60 micrometres long. At 20 times magnification its image length, in micrometres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **A microscope has an eyepiece magnification of 10 times and an objective magnification of 30 times. Total magnification is**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **A cell is 15 micrometres long. At 400 times magnification its image length, in micrometres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **A microscope has an eyepiece magnification of 5 times and an objective magnification of 20 times. Total magnification is**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 2000
2. 40
3. 500
4. 1000
5. B
6. 4000
7. B
8. A
9. B
10. C
11. 2000
12. 100
13. 400
14. 1000
15. 5000
16. 400
17. 600
18. 2000
19. 50
20. 3000
21. 200
22. 1200
23. 300
24. 6000
25. 100

© 2026 Brett Robbins. All Rights Reserved.