BIOLOGY · NORTH DAKOTA

Biology
Practice Test

Unit 1: Cells and Molecular Biology

25 Questions

Original practice test based on the North Dakota curriculum. Work through each question, then check your answers at the end.

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.

© 2026 Brett Robbins. All Rights Reserved.

Question 1

Which organelle produces most of a cell ATP

A) Nucleus

B) Mitochondrion

C) Ribosome

D) Golgi apparatus

Understand It with Pulse

Flag a mistake

Question 2

The organelle where proteins are assembled from amino acids is the

A) Lysosome

B) Ribosome

C) Vacuole

D) Cell membrane

Understand It with Pulse

Flag a mistake

Question 3

The structure that controls which substances enter and leave a cell is the

A) Vacuole

B) Nucleus

C) Cell membrane

D) Cytoskeleton

Understand It with Pulse

Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

Question 4

In an animal cell most of the DNA is stored in the

A) Mitochondrion

B) Ribosome

C) Golgi apparatus

D) Nucleus

Understand It with Pulse

Flag a mistake

Question 5

The organelle that packages proteins for transport out of a cell is the

A) Golgi apparatus

B) Lysosome

C) Nucleus

D) Vacuole

Understand It with Pulse

Flag a mistake



Question 6

The organelle that breaks down worn out cell parts with enzymes is the

A) Ribosome

B) Lysosome

C) Mitochondrion

D) Cell membrane

Understand It with Pulse

Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.



Question 7

In a plant cell photosynthesis takes place in the

A) Mitochondrion

B) Nucleus

C) Chloroplast

D) Ribosome

Understand It with Pulse | Flag a mistake

Question 8

The large organelle that stores water in a plant cell is the

A) Golgi apparatus

B) Lysosome

C) Mitochondrion

D) Central vacuole

Understand It with Pulse | Flag a mistake

Question 9

A prokaryotic cell differs from a eukaryotic cell because it has no

A) Membrane bound nucleus

B) Cell membrane

C) Ribosomes

D) DNA

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.



Question 10

Which statement is part of cell theory

A) All living things are made of one or more cells

B) Cells can form from nonliving matter

C) Only animals are made of cells

D) Cells are all identical in size

Understand It with Pulse | Flag a mistake

Question 11

Diffusion is the movement of particles from an area of high concentration to an area of

A) Low concentration

B) High pressure

C) Low temperature

D) High energy

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

Question 12

Osmosis is the diffusion of which substance across a cell membrane

A) Glucose

B) Water

C) Oxygen

D) Carbon dioxide

Understand It with Pulse Flag a mistake

Question 13

Active transport moves substances against a concentration gradient and requires

A) Light

B) Heat

C) ATP

D) Water

Understand It with Pulse Flag a mistake

Question 14

An enzyme speeds up a chemical reaction in a cell by

A) Raising the temperature of the whole cell

B) Being used up in the reaction

C) Lowering the activation energy needed

D) Adding energy to the products

Understand It with Pulse Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

Question 15

The part of an enzyme where a substrate binds is called the

A) Active site

B) Cell wall

C) Product site

D) Membrane pore

Understand It with Pulse Flag a mistake

Question 16

Very high temperature can stop an enzyme from working because it causes the enzyme to

A) Multiply

B) Denature

C) Replicate

D) Photosynthesize

Understand It with Pulse Flag a mistake

Question 17

In a DNA molecule the base adenine always pairs with

A) Guanine

B) Cytosine

C) Thymine

D) Uracil

Understand It with Pulse Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

Question 18

The shape of a DNA molecule is best described as a

A) Single strand

B) Triple helix

C) Flat sheet

D) Double helix

Understand It with Pulse

Flag a mistake



Question 19

The monomer that makes up a protein is an

A) Amino acid

B) Fatty acid

C) Nucleotide

D) Glucose unit

Understand It with Pulse

Flag a mistake

Question 20

The monomer that makes up a nucleic acid is a

A) Amino acid

B) Nucleotide

C) Fatty acid

D) Glycerol unit

Understand It with Pulse

Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.



Question 21

The process in which a DNA sequence is copied into messenger RNA is called

A) Translation

B) Replication

C) Mutation

D) Transcription

Understand It with Pulse | Flag a mistake

Question 22

During translation the molecule that carries an amino acid to a ribosome is

A) Transfer RNA

B) DNA

C) Glucose

D) ATP

Understand It with Pulse | Flag a mistake

Question 23

A group of three bases on messenger RNA that codes for one amino acid is a

A) Gene

B) Chromosome

C) Codon

D) Anticodon

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

Question 24

The phase of mitosis in which sister chromatids are pulled apart is

A) Prophase

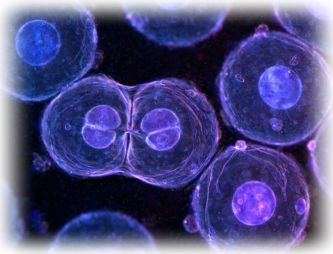
B) Anaphase

C) Telophase

D) Interphase

Understand It with Pulse

Flag a mistake



Question 25

One cell divides by mitosis four times in a row with no cells dying How many cells result

Understand It with Pulse

Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.