ARKANSAS BIOLOGY · UNIT 1 · 10 QUESTIONS

Cells and Molecular Biology — 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 **DNA replication is semiconservative, so each daughter molecule after one round contains**

- A Two old strands
- B One old strand and one new strand
- C Two new strands only
- D No old strand

Understand It with Pulse | Flag a mistake

2 **Transcription copies a gene from DNA into**

- A A new DNA double helix
- B A lipid bilayer
- C Messenger RNA
- D A protein directly

Understand It with Pulse | Flag a mistake

3 **Translation builds a polypeptide at a ribosome by reading**

- A DNA directly without RNA
- B Lipid chains
- C Starch granules
- D Messenger RNA codons

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4 **A codon table states that UUU codes for phenylalanine and AUG codes for methionine The sequence AUGUUU codes for methionine followed by**

- A Phenylalanine
- B Histidine
- C Cysteine
- D Methionine again

Understand It with Pulse | Flag a mistake

5 **Photosynthesis in a plant uses carbon dioxide and water with light energy to produce**

- A Carbon dioxide and water
- B Glucose and oxygen
- C ATP and lactic acid
- D Nitrogen and hydrogen

Understand It with Pulse | Flag a mistake

6 **Aerobic respiration uses glucose and oxygen to produce carbon dioxide, water, and**

- A Glucose again
- B Lactic acid only
- C ATP
- D Oxygen again

Understand It with Pulse | Flag a mistake

7 **ATP stores energy in bonds between phosphate groups, and removing one phosphate leaves**

- A DNA
- B Glucose
- C Amino acid
- D ADP

Understand It with Pulse | Flag a mistake

8 **When oxygen is absent, muscle cells can still make a small amount of ATP by**

- A Fermentation
- B Photosynthesis
- C Replication
- D Active transport

Understand It with Pulse | Flag a mistake

9 **Small cells exchange materials faster than large cells because they have a larger**

- A Volume to surface area ratio
- B Surface area to volume ratio
- C Nucleus to cytoplasm ratio
- D Membrane to wall ratio

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10 **Most of a cell cycle is spent in interphase, during which the cell mainly**

- A Divides its cytoplasm only
- B Loses its nucleus
- C Grows and copies its DNA
- D Stops making proteins

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	B	**5.**	B	**9.**	B
2.	C	**6.**	C	**10.**	C
3.	D	**7.**	D		
4.	A	**8.**	A		

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