NOVA SCOTIA ADVANCED BIOLOGY 11 · UNIT A · 10 QUESTIONS

# Matter and Energy for Life — 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** **In enzyme rate work, the independent variable is the factor the investigator**

- **A** measures as a result
- **B** changes deliberately
- **C** keeps constant always
- **D** ignores completely

Understand It with Pulse | Flag a mistake

**2** **In osmosis experiments, mass change in potato tissue indicates**



A starch content only

B cell number

C chlorophyll amount

D net water movement

Understand It with Pulse | Flag a mistake

3 **Keeping substrate concentration constant while testing pH controls a**

A result

B product

C confounding variable

D hypothesis

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4 **Light intensity affects photosynthesis rate until another factor becomes**



A limiting

B absent

C constant always

D irrelevant

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5

## Noncompetitive inhibition changes enzyme shape by binding

A to the substrate only

B inside the nucleus

C to water

D away from the active site

Understand It with Pulse | Flag a mistake

6

## Surface area to volume ratio falls as a cell

A gets smaller

B gets larger

C divides

D loses water

Understand It with Pulse | Flag a mistake

7 **The active site of an enzyme is the region where the**

A product is stored forever

B cell wall forms

C DNA is copied

D substrate binds

Understand It with Pulse | Flag a mistake

8 **The Calvin cycle builds sugars using carbon from**

A carbon dioxide

B oxygen gas

C water vapour only

D glucose directly

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9 **The dependent variable in a rate experiment is the**

A temperature set

B rate measured

C enzyme amount set

D time of day

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10 **The electron transport chain is located in the**

A outer cell wall

B inner mitochondrial membrane

C stroma

D vacuole membrane

Understand It with Pulse | Flag a mistake

## ANSWER KEY

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

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