PRINCE EDWARD ISLAND BIOLOGY 11 · UNIT B

Cellular Respiration and Photosynthesis — Practice Test

Prince Edward Island Biology 11 • 25 questions

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 **Cellular respiration of 1 glucose molecules produces how many carbon dioxide molecules in total, if each glucose produces 6 carbon dioxide molecules**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **Cellular respiration of 1 glucose molecules uses how many oxygen molecules in total, if each glucose uses 6 oxygen molecules**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **Glycolysis produces a net gain of 2 ATP molecules per glucose molecule. How many ATP molecules in total are gained from 2 glucose molecules by glycolysis alone**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **Photosynthesis to make 1 glucose molecules uses how many carbon dioxide molecules in total, if each glucose needs 6 carbon dioxide molecules**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **Aerobic respiration requires**

A carbon dioxide only

B light

C chlorophyll

D oxygen

Understand It with Pulse | Flag a mistake

6

Anaerobic respiration in muscle cells produces

A lactic acid

B ethanol always

C oxygen

D glucose

Understand It with Pulse | Flag a mistake

7

Anaerobic respiration in yeast produces

A lactic acid only

B ethanol and carbon dioxide

C oxygen

D water only

Understand It with Pulse | Flag a mistake

8 **Cellular respiration and photosynthesis are linked because the products of one are the**

A enzymes of the other

B waste only

C reactants of the other

D pigments of the other

Understand It with Pulse | Flag a mistake

9 **Cellular respiration breaks down glucose to release**

A energy for the cell

B light

C chlorophyll

D water only

Understand It with Pulse | Flag a mistake

10 **Cellular respiration takes place mainly in the**

A chloroplast

B mitochondrion

C nucleus

D Golgi body

Understand It with Pulse | Flag a mistake

11 **Fermentation produces much less ATP per glucose than**

A photosynthesis

B glycolysis only

C diffusion

D aerobic respiration

Understand It with Pulse | Flag a mistake

12 **Glycolysis takes place in the**

A mitochondrion only

B chloroplast

C cytoplasm

D nucleus

Understand It with Pulse | Flag a mistake

13 **In photosynthesis, light energy is converted to**

A heat only

B chemical energy in glucose

C kinetic energy

D electrical energy

Understand It with Pulse | Flag a mistake

14 **Light dependent reactions of photosynthesis take place in the**

A thylakoid membranes

B stroma only

C mitochondrion

D cytoplasm

Understand It with Pulse | Flag a mistake

15 **Photosynthesis takes place mainly in the**

A chloroplast

B mitochondrion

C nucleus

D ribosome

Understand It with Pulse | Flag a mistake

16 **Photosynthesis uses light energy to make**

A oxygen from glucose

B ATP from protein

C water from oxygen

D glucose from carbon dioxide and water

Understand It with Pulse | Flag a mistake

17 **Plants need carbon dioxide for photosynthesis, which enters through the**

A roots only

B xylem

C phloem

D stomata

Understand It with Pulse | Flag a mistake

18 **Cellular respiration of 2 glucose molecules produces how many carbon dioxide molecules in total, if each glucose produces 6 carbon dioxide molecules**

ANSWER _____

Understand It with Pulse | Flag a mistake

19 **Cellular respiration of 2 glucose molecules uses how many oxygen molecules in total, if each glucose uses 6 oxygen molecules**

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **Glycolysis produces a net gain of 2 ATP molecules per glucose molecule. How many ATP molecules in total are gained from 4 glucose molecules by glycolysis alone**

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **Photosynthesis to make 2 glucose molecules uses how many carbon dioxide molecules in total, if each glucose needs 6 carbon dioxide molecules**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **Cellular respiration of 3 glucose molecules produces how many carbon dioxide molecules in total, if each glucose produces 6 carbon dioxide molecules**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **Cellular respiration of 3 glucose molecules uses how many oxygen molecules in total, if each glucose uses 6 oxygen molecules**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **Glycolysis produces a net gain of 2 ATP molecules per glucose molecule. How many ATP molecules in total are gained from 6 glucose molecules by glycolysis alone**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **Photosynthesis to make 3 glucose molecules uses how many carbon dioxide molecules in total, if each glucose needs 6 carbon dioxide molecules**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.