CONNECTICUT 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 **Which statement about Cell theory is correct**

- A movement from high to low concentration
- B diffusion of water across a membrane
- C the idea that all living things are made of cells
- D movement against a gradient using ATP

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2 **Which statement about Diffusion is correct**

- A diffusion of water across a membrane
- B movement against a gradient using ATP
- C a protein speeding up a chemical reaction
- D movement from high to low concentration

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3 **Which statement about Osmosis is correct**

A diffusion of water across a membrane

B movement against a gradient using ATP

C a protein speeding up a chemical reaction

D the part of an enzyme where a substrate binds

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4 **Which statement about Active transport is correct**

A a protein speeding up a chemical reaction

B movement against a gradient using ATP

C the part of an enzyme where a substrate binds

D loss of enzyme shape from heat or pH change

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5 **Which statement about Enzyme is correct**

A the part of an enzyme where a substrate binds

B loss of enzyme shape from heat or pH change

C a protein speeding up a chemical reaction

D the molecule carrying genetic instructions

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

ANSWER _____

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7 **A human body cell has 46 chromosomes A human gamete formed by meiosis normally has**

ANSWER _____

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8

A DNA sample is 30 percent adenine Because adenine pairs with thymine what percent is thymine

ANSWER

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9

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

ANSWER

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10

A DNA sample is 20 percent guanine. Because guanine pairs with cytosine, what percent is cytosine

ANSWER

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ANSWER KEY

1.	C	**5.**	C	**9.**	8
2.	D	**6.**	16	**10.**	20
3.	A	**7.**	23		
4.	B	**8.**	30		

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