CONNECTICUT BIOLOGY · UNIT 2 · 10 QUESTIONS

Genetics and Heredity — 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 Mitosis is correct**

- A a change in a DNA sequence
- B a structure of coiled DNA and protein
- C cell division producing two identical daughter cells
- D a reproductive cell such as an egg or sperm

Understand It with Pulse | Flag a mistake

2 **Which statement about Mutation is correct**

- A a structure of coiled DNA and protein
- B a reproductive cell such as an egg or sperm
- C a cell formed by fusion of two gametes
- D a change in a DNA sequence

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3 **Which statement about Chromosome is correct**

A a structure of coiled DNA and protein

B a reproductive cell such as an egg or sperm

C a cell formed by fusion of two gametes

D exchange of segments between homologous chromosomes

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4 **Which statement about Gamete is correct**

A a cell formed by fusion of two gametes

B a reproductive cell such as an egg or sperm

C exchange of segments between homologous chromosomes

D separate inheritance of different genes

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5 **Which statement about Zygote is correct**

A exchange of segments between homologous chromosomes

B separate inheritance of different genes

C a cell formed by fusion of two gametes

D a chart tracing traits through a family

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6 **A cross of two heterozygous parents for a dominant trait gives, in a simplified model, the number of offspring out of 4 expected to show the dominant trait**

ANSWER _____

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7 **A cross of two heterozygous parents gives, out of 4 offspring, the number expected to be homozygous recessive**

ANSWER _____

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8 **A pea plant with genotype TT crossed with tt gives, out of 4 offspring, the number expected to be Tt**

ANSWER _____

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9 **A human gamete has 23 chromosomes. After fertilization, the zygote normally has**

ANSWER _____

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10 **A cell with 8 chromosomes divides by meiosis. Each gamete normally has**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	C	**5.**	C	**9.**	46
2.	D	**6.**	3	**10.**	4
3.	A	**7.**	1		
4.	B	**8.**	4		

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