PRINCE EDWARD ISLAND BIOLOGY 12 · UNIT C

Heredity and Molecular Genetics — Practice Test

Prince Edward Island Biology 12 • 10 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 **Codominance means both alleles are**

A fully expressed in the heterozygote

B hidden in the heterozygote

C recessive

D on different chromosomes

Understand It with Pulse | Flag a mistake

2 **Incomplete dominance gives a heterozygote phenotype that is**

A fully dominant

B fully recessive

C absent

D intermediate

Understand It with Pulse | Flag a mistake

3 **A cross of Aa with Aa gives 40 offspring. The expected number with a dominant phenotype is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **If adenine is 40 percent of DNA bases, the combined percent of guanine and cytosine is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **A messenger RNA has 60 nucleotides. The number of codons is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A DNA segment has 50 adenine bases and 50 thymine bases. The total of those two bases is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A cross of Aa with aa gives 30 offspring. The expected number with a heterozygous genotype is**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **If cytosine is 25 percent of DNA bases, thymine plus adenine together are this percent**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **A messenger RNA has 210 nucleotides. The number of codons is**

ANSWER

Understand It with Pulse | Flag a mistake

10 **A cross of AA with Aa gives offspring. The probability of a dominant phenotype as a decimal is**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	A	**5.**	20	**9.**	70
2.	D	**6.**	100	**10.**	1
3.	30	**7.**	15		
4.	20	**8.**	50		

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