

Take Test: Test 5 DNA > Protein

Test Information

Description This is the fiith test on DNA > Protein

Instructions

Timed Test This test has a time limit of 30 minutes. This test will save and submit automatically when the time expires. Warnings appear when **half the time, 5 minutes, 1 minute, and 30 seconds** remain.

Multiple Attempts This test allows 2 attempts. This is attempt number 1.

Completion Once started, this test must be completed in one sitting. Do not leave the test before clicking **Save and Submit**.

Remaining Time: 01 minute, 54 seconds.

▼ Question Completion Status:

QUESTION 1

4 points

Saved

1) DNA and RNA always grow like this: 5' > 3', elongating at the 3' end.

- Yes
 No

QUESTION 2

4 points

Saved

2) Nondisjunction can cause:

- A) polyploidy
 B) Trisomy
 C) Monosomy
 D) All the above.

QUESTION 3

4 points

Saved

3) What is Rosalind Franklin's scientific achievement when it comes to DNA

- A) Her role was not very big.
- B) She was the first to create a model of DNA
- C) She did experiments with pathogenic strains of bacteria
- D) She took the X-ray diffraction photographs of DNA and did calculations that were necessary to deduce the structure of DNA.

QUESTION 4**4 points****Saved**

4) In DNA adenine (A) pairs with ____ and guanine (G) pairs only with _____

- A) thymine (T), cytosine (C)
- B) cytosine (C), cytosine (C)
- C) guanine (G), guanine (G)
- D) cytosine (C) thymine (T)

QUESTION 5**4 points****Saved**

5) In RNA adenine (A) pairs with ____ and guanine (G) pairs only with _____

- A) thymine (T), cytosine (C)
- B) uracil (U), cytosine (C)
- C) thymine (T), uracil (U)
- D) cytosine (C) thymine (T)

QUESTION 6**4 points****Saved**

6) What kind of chemical bond is found between paired bases of the DNA double helix?

- A) hydrogen
- B) ionic
- C) covalent
-

D) sulfhydryl

QUESTION 7**4 points****Saved**

7) Please match the DNA replication enzymes

A. 1 Helicase

C. 2 Topoisomerase

B. 3 DNA ligase

D. 4 Primase

E. 5 Polymerase

A. A enzyme that untwist the double helix at the replication forks

B. E corrects “overwinding” ahead of replication forks by breaking, swiveling, and rejoining DNA strands

C. C heals and smoothes cuts in the DNA

D. D adds RNA nucleotides one at a time to start DNA replication

E. B One replaces the RNA primer the other elongates the DNA

QUESTION 8**4 points****Saved**

8) What is the function of telomeres

A) They postpone the erosion of genes near the end of the DNA molecule

B) They code for polypeptides

C) They help with DNA replication

D) They are what are left from the Okazaki fragments.

QUESTION 9**4 points****Saved**

9) What amino acid sequence will be generated, based on this mRNA codon sequence?

		Second Base				
		U	C	A	G	
First Base	U	UUU } Phe UUC } UUA } Leu UUG }	UCU } Ser UCC } UCA } UCG }	UAU } Tyr UAC } UAA } Stop UAG } Stop	UGU } Cys UGC } UGA } Stop UGG } Trp	U C A G
	C	CUU } Leu CUC } CUA } CUG }	CCU } Pro CCC } CCA } CCG }	CAU } His CAC } CAA } Gln CAG }	CGU } Arg CGC } CGA } CGG }	U C A G
	A	AUU } Ile AUC } AUA } AUG } Met or Start	ACU } Thr ACC } ACA } ACG }	AAU } Asn AAC } AAA } Lys AAG }	AGU } Ser AGC } AGA } Arg AGG }	U C A G
	G	GUU } Val GUC } GUA } GUG }	GCU } Ala GCC } GCA } GCG }	GAU } Asp GAC } GAA } Glu GAG }	GGU } Gly GGC } GGA } GGG }	U C A G

- A) met-arg-glu-arg-glu-arg
- B) met-glu-arg-arg-gln-leu
- C) met-ser-leu-ser-leu-ser
- D) met-ser-ser-leu-ser-leu
- E) met-leu-phe-arg-glu-glu

QUESTION 10

4 points

Saved

10) Where would you find Okazaki fragments?

- Yes
- No

QUESTION 11

4 points

Saved

11) What does a histone do?

- A) It is like a spool that the chromosome wraps around
- B) It is for replication
- C) It starts replication
- D) It is at the end of the chromosome to slow its erosion.

QUESTION 12**4 points****Saved**

12) What are the three stages and order of transcription?

- A) Initiation > Elongation > Termination
- B) Initiation > Suspension > Termination
- C) Initiation > Termination > Elongation
- D) Initiation > Termination > Twisting >

QUESTION 13**4 points****Save Answer**

13) Please write transcription or translation for this two process:

_____ mRNA -> polypeptide

QUESTION 14**4 points****Saved**

14) What is a codon?

- A) a splicesosome
- B) The three-letter match in tRNA
- C) a mutation
- D) a three-nucleotide words that codes for an amino acid

QUESTION 15**4 points****Saved**

When talking about codons wobble is how codons can start anywhere.

- True
 False

QUESTION 16

4 points

Saved

17) A gene's location along a chromosome is known as which of the following?

- A) Allele
 B) Sequence
 C) Locus
 D) Variant
 E) Trait

QUESTION 17

4 points

Saved

18) What signals the RNA to start replicating from DNA?

- A) Poly-A tail
 B) Promoter called a TATA box
 C) 5' cap
 D) AAAAAAAAAA

QUESTION 18

4 points

Saved

19) Please match the binding sites:

- A. 1 The P site
B. 2 The A site:
C. 3 The E site

- A. holds the tRNA that carries the growing polypeptide chain
B. holds the tRNA that carries the next amino acid to be added to the chain
C. is the exit site, where discharged tRNAs leave the ribosome

QUESTION 19

4 points

Saved

20) Which is kept?

- Yes
 No

QUESTION 20

4 points

Saved

21) If two genes such as a grey body and normal wings are usually found together they are usually

- A) locus
 B) linked
 C) recombinant
 D) variants

QUESTION 21

4 points

Saved

22) The anticodon of a particular tRNA molecule is

- A) complementary to the corresponding triplet in rRNA.
 B) changeable, depending on the amino acid that attaches to the tRNA.
 C) catalytic, making the tRNA a ribozyme.
 D) complementary to the corresponding mRNA codon

QUESTION 22

4 points

Saved

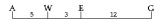
23) The following is a map of four genes on a chromosome:

↑ 3 W 3 E 12 G

- A) A and W
- B) W and E
- C) E and G
- D) A and E
- E) A and G

QUESTION 23**4 points****Saved**

24) How many map units is E away from G



↑ W F L G

- A) 5
- A) 5
- B) 3
- C) 25
- D) 12

QUESTION 24**4 points****Saved**

25) What is happening where the arrow is pointed



- A) Transcription
- B) RNA splicing
- C) Replication
- D) Translation

QUESTION 25**4 points****Saved**

15) Do all creatures use the same 21 amino acids?

- Yes
- No

Click Save and Submit to save and submit. Click Save All Answers to save all answers.

Save All An: