Name: _____ Date: _____

Biology Test

1. containing two complete sets of chromosomes

2. a specialized type of cell division that reduces the chromosome number by half

3. A group of four closely associated chromatids of a homologous pair formed by synapsis

4. a eukaryotic cell formed by a fertilization event between two gametes

5. the genetic alteration of a cell resulting from the introduction

6. the scientific discipline concerned with the study of all biological aspects

7. the hydrogen bonding between complementary bases that holds together the two strands of the double helix of DNA and RNA

8. the process of duplicating or producing an exact copy of the DNA involving many enzymes that split down the mother cell and create 'daughter' copies

9. The DNA polymerases are enzymes that create DNA molecules by assembling nucleotides, the building blocks of DNA

10. a region of repetitive nucleotide sequences at each end of a chromosome

11. a polymeric molecule implicated in various biological roles in coding, decoding, regulation, and expression of genes

12. a large family of RNA molecules that convey genetic information from DNA to the ribosome

13. an RNA that is a structural and functional component of ribosomes

14. RNA consisting of folded molecules that transport amino acids from the cytoplasm of a cell to a ribosome

15. the first step of gene expression, in which a particular segment of DNA is copied into RNA

16. is an enzyme that produces primary transcript RNA

17. a region of DNA that initiates transcription of a particular gene

18. is any nucleotide sequence within a gene that is removed by RNA splicing during maturation of the final RNA product

A. exon

B. RNA polymerase

C. gene expression

D. zygote

E. genetic code

F. codon

G. replication

H. messenger RNA

I. mutation

J. base pairing

K. meiosis

L. tetrad

M. anticodon

N. translation

O. intron

P. transfer RNA

Q. diploid

R. polypeptide

19. a segment of a DNA or RNA molecule containing information coding for a protein or peptide sequence

S. telomere

20. a linear organic polymer consisting of a large number of amino-acid residues bonded together in a chain, forming part of (or the whole of) a protein molecule

T. transformation

21. a sequence of three nucleotides that together form a unit of genetic code in a DNA or RNA molecule

U. promoter

22. the corresponding triplet sequence on the transfer RNA (tRNA) which brings in the specific amino acid to the ribosome during translation

V. DNA polymerase

23. the set of rules by which information encoded within genetic material (DNA or mRNA sequences) is translated into proteins by living cells

W. ribosomes RNA

24. the process in which cellular ribosomes create proteins

X. RNA

25. the process by which information from a gene is used in the synthesis of a functional gene product

Y. transcription

26. a change in your genes or DNA sequence

Z. bacteriophage