

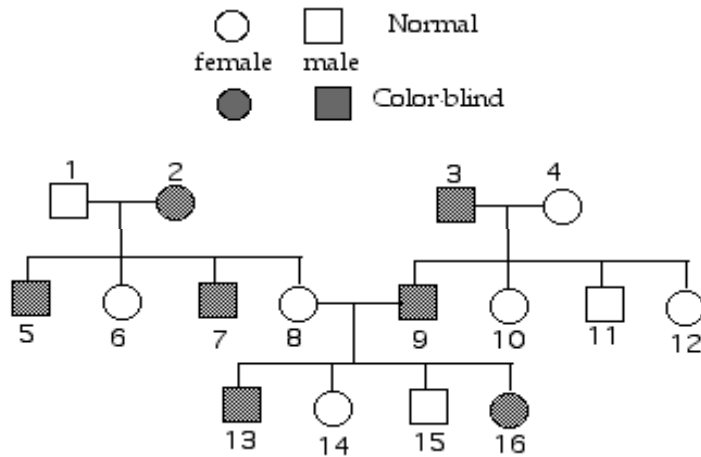
Name _____ Period _____

Transcription Test Review

1. What is the purpose of the nitrogen bases?
2. Where does DNA replication take place? Transcription? Translation?
3. Transcribe and translate the following DNA base sequence: AACTTGGGCCAATACATC
4. What is a nucleotide?
5. Describe the process of transcription. What is the final product made in transcription?
6. Describe the process of translation. What is the final product of translation?
7. What are codons? Anticodons?
8. What are the three differences between RNA and DNA?
9. What is gene splicing?

10. If a male who is color-blind marries a female who is a carrier, what are the probable genotypes of their children (the F1 generation)?

11. Examine the following pedigree chart of color-blindness. In humans, color blindness is caused by a **recessive sex-linked** allele. On the diagram, label the genotypes of the individuals 1-16.



12. Draw a molecule of DNA (include hydrogen bonds, nitrogen bases, sugar and phosphate).

13. What is the role of tRNA? mRNA?

14. What are three possible causes of mutations?

15. Describe a frameshift mutation.