**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_ Date: \_\_\_\_\_\_\_\_**

***WHAT HAVE I LEARNED ABOUT TRANSCRIPTION?***

1. Identify the following strand fragments of nucleic acids as **RNA** or **DNA**.
   1. ACCTGGC \_\_\_\_\_
   2. AAGCCUU \_\_\_\_\_
   3. TTCCGAA \_\_\_\_\_
   4. GGGUGG \_\_\_\_\_
   5. UCGAUC \_\_\_\_\_
   6. ATTGCCT \_\_\_\_\_
2. Describe the three main differences between RNA and DNA?

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1. What are introns and exons? What is the difference between them?

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1. What do you think would happen if the introns were not removed from the pre-mRNA?

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1. What happens during transcription?

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1. The following genes have the following sequences of nucleotides. From left to right write the sequence of the mRNA molecule transcribed from them.
   1. GACATTTA
   2. GATTACA
   3. TTTTAAAA
   4. ATTGGCCA
   5. AAAGGGCT
   6. GGGCCTTA
   7. CCCTTTAAA
   8. TAAAAAAAT