**Name: Period: Date:**

**Focus Questions for Chapter 17.2-3 (Transcription/RNA Processing) due Tuesday, 2/11**

# Questions to answer as you read about transcription and RNA processing by eukaryotes. You will not be asked to turn these in, but Ms. Ransom may check to make sure you have completed them through a clicker quiz or short written response. You should be ready to discuss the answers during class.

1. What is the function of **RNA polymerase**?
2. In prokaryotic transcription, the process begins at the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and ends at the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. What is the role of **transcription factors** in eukaryotes?
4. What is the **TATA box**?
5. How fast is transcription (in eukaryotes)? Can a gene be transcribed by more than one molecule of RNA polymerase?
6. How does the termination of transcription differ between prokaryotes and eukaryotes?
7. How is a strand of eukaryotic mRNA altered with a **5’ cap** and a **poly-A tail**?
8. What is **RNA splicing?**
9. How do **introns** differ from **exons**?
10. What is the role of a **spliceosome**?
11. How is **alternative RNA splicing** important in the evolution of organisms?

**Questions I have that I plan to ask about in class:**