Last Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ First name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ PID:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Please answer the questions and turn in on Thurs, 2 Oct in class. No LATE ASSIGNMENTS WILL BE GRADED.**

• Question 1

True or false: If false, make sure you understand why and could restate the question.

All RNAs are translated

• Question 2

True or false: If false, make sure you understand why and could restate the question.

In all organisms, all genes are transcribed from the same DNA template strand.

• Question 3

True or false: If false, make sure you understand why and could restate the question.

Promoters are always upstream of the +1 transcription start of a gene.

• Question 4

True or false: If false, make sure you understand why and could restate the question.

Sigma subunits dissociate from RNA polymerase after transcription has terminated

• Question 5

True or false: If false, make sure you understand why and could restate the question.

In both prokaryotes and eukaryotes, transcription of an mRNA terminates precisely at the end of the protein-coding sequence.

• Question 6

True or false: If false, make sure you understand why and could restate the question.

The 3' acceptor stems on tRNAs specify which amino acid is attached.

• Question 7

True or false: If false, make sure you understand why and could restate the question.

The spliceosome is a large, ribonucleoprotein complex located in the cytoplasm of eukaryote