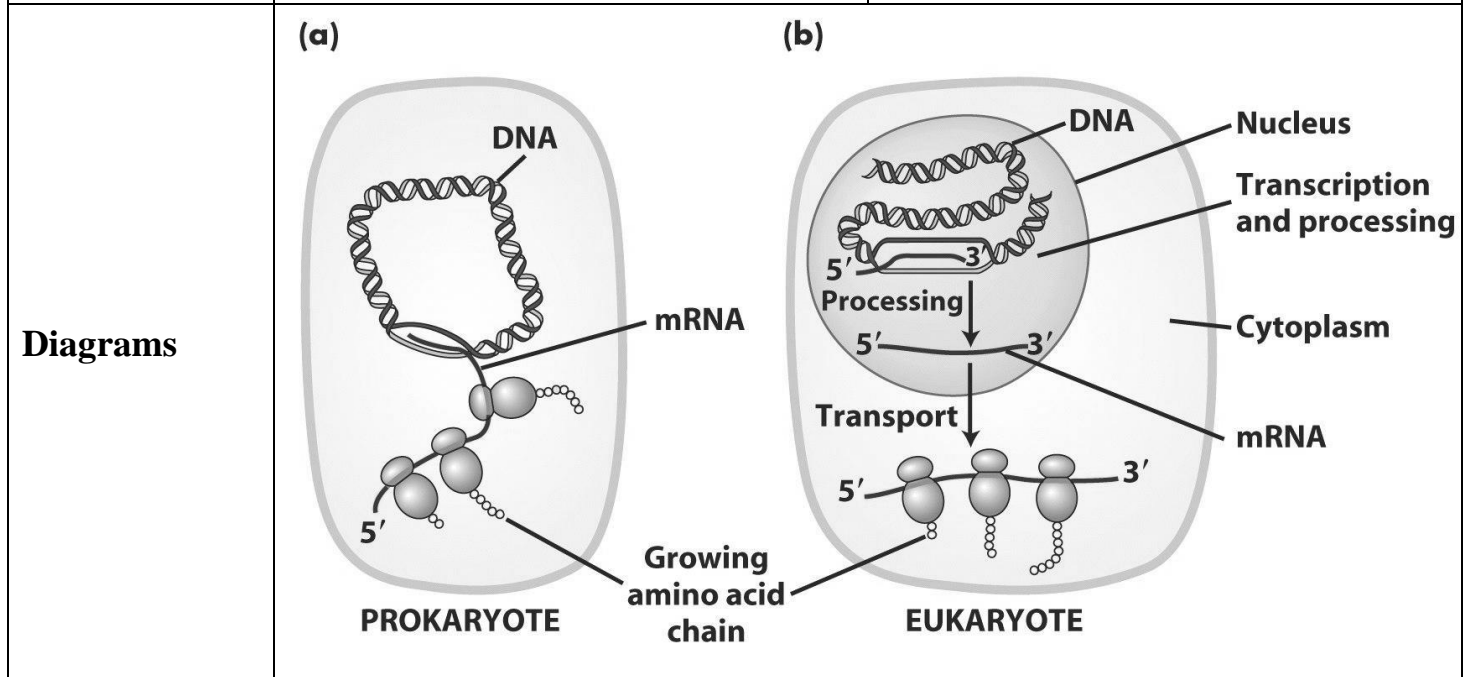


Key Differences Between Eukaryotes and Prokaryotes

	Prokaryotes	Eukaryotes
Membrane & Overall Process		
Introns		
mRNA Recognition		
Ribosomes		
Start Codon		
Operons		
Genome		



Key Differences Between Eukaryotes and Prokaryotes

	Prokaryotes	Eukaryotes
Membrane & Overall Process	<ul style="list-style-type: none"> - No nuclear membrane - Coupled transcription-translation - RNA polymerase II 	<ul style="list-style-type: none"> - Have nuclear membrane - Transcription occurs first in the nucleus - Transcription occurs second in the cytoplasm.
Introns	No introns	Have introns
mRNA Recognition	Ribosomes recognize the Shine-Dalgarno Sequence as the start of the mRNA transcript. (purine rich sequence)	Ribosomes recognize the 5' cap placed on the mRNA.
Ribosomes	Small ribosomes comparatively.	Large ribosomes comparatively.
Start Codon	Start Codon = formyl-methionine (Methionine with a formyl group)	Start Codon = methionine
Operons	Have operons.	Do not have operons.
Genome	Genome is a circular chromosome.	Genome is organized into many chromosomes.

