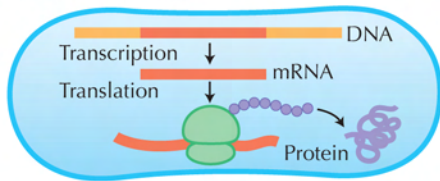


A Bacteria and archaea



B Eukaryote

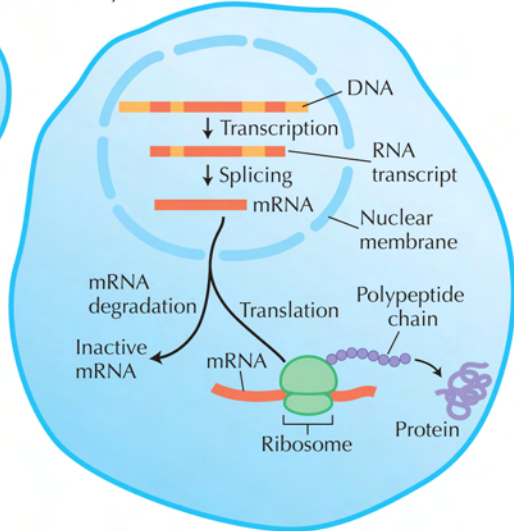


FIGURE 8.3. Eukaryotic vs. bacterial and archaeal transcription and translation. (A) In bacteria and archaea, transcription and translation happen in the same location in the cell and are frequently coupled to each other with translation occurring while an RNA is still being made. (B) In eukaryotes, transcription and splicing occur in the nucleus and then RNA is exported out of the nucleus where translation occurs. Coding regions are in red.