



**Across:**

2. sequence at the beginning of the gene and immediately downstream of the promoter that gets transcribed but not translated
5. a transcription factor that is responsible for unwinding DNA at the promoter
7. the modification of the 3' end of eukaryotic gene by adding a .....
8. the eukaryotic RNA polymerase responsible for transcribing ribosomal RNA genes
11. the RNA sequence at the end (3') of the intron
13. the process of modifying the 5' end of a eukaryotic mRNA
14. the eukaryotic messenger RNA before applying modifications
15. parts of the gene that contain the code for amino acids
16. the molecular machinery that performs intron splicing
17. the process of removing non-coding sequence from eukaryotic mRNA
18. sequence upstream of the promoter and indirectly affect transcription
19. the RNA sequence at the beginning (5') of the intron

## **Down:**

1. the eukaryotic RNA polymerase responsible for transcribing protein coding genes
2. adding 7mG to the eukaryotic mRNA by ..... bond
3. the eukaryotic RNA polymerase mostly responsible for transcribing tRNA genes
4. sequence at the end of the gene that gets transcribed but not translated
5. a specific protein that recognizes and binds to the eukaryotic promoter
6. removing introns resulting in different combination of exons and different proteins
9. parts of the gene that have no code and gets removed
10. a specific sequence at the end of the gene that causes cleavage of the transcript and the termination of transcription
12. a sequence of the promoter located at -30
18. sequence upstream of the beginning of the gene where transcription factors attach before the start of transcription