

Link to [Online Transcription Simulation](#). Click through and answer the questions below:

-Overview Section Questions:

1. What is built using the information from DNA through the process of transcription and translation?
2. Where is the DNA located?
3. DNA is coiled tightly to form a _____?
4. Why doesn't the DNA travel outside the nucleus to take information to the cytoplasm/ribosome?
5. What is made to carry the information from the gene to the cytoplasm/ribosome?
6. What is the first step towards making a protein called?
7. Why can the mRNA travel outside of the nucleus, while the DNA can not?
8. What is the second set in the process of making a protein called?
9. What does the ribosome string together to make a protein?
10. What does the amino acid chain do after it has been strung together?
11. What does the protein do after translation?

-Transcription Section Questions:

12. How many steps does this website indicate are needed to make a protein? **2 steps in this website...3 that we will learn about.**
13. What three regions do all genes have?
14. What enzyme is responsible for reading the DNA and building the RNA strands?
15. What does the promoter region of the gene do?
16. Explain how the RNA polymerase builds the RNA strand.
17. mRNA has what instead of Ts? Hint, look at the animation that is building the mRNA strand.
18. What happens at the termination sequence of the gene?