

Where is DNA located? _____

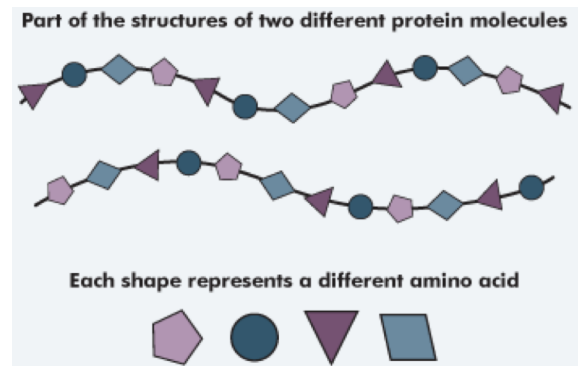
List as many facts about DNA as you can remember:



Protein Synthesis

DNA directs how proteins are made

The variety of life on earth is due to different proteins



Proteins

Proteins are made up of units called _____

Proteins are large and have _____

Proteins differ from each other

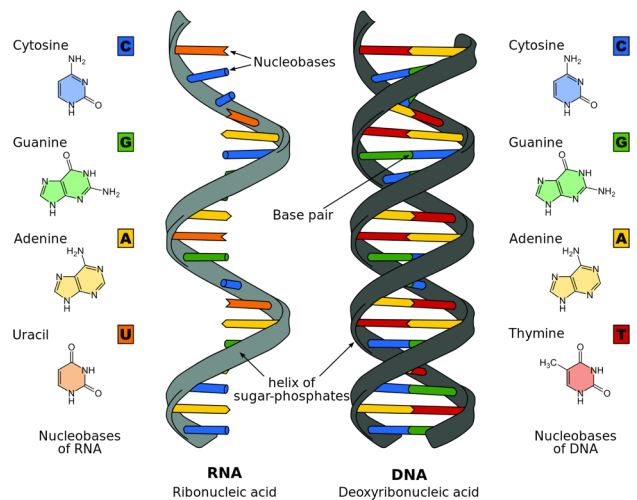
Three letter DNA code _____

Ex. TGG

DNA vs RNA

DNA

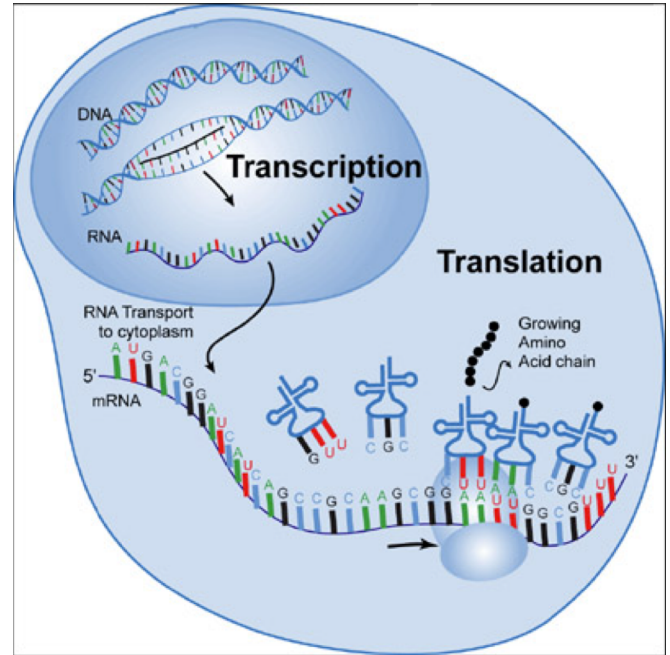
RNA



Protein Synthesis

Transcription (mRNA)

Translation (tRNA)



In Summary ...

DNA T A C | A A A | A G C | G G T

makes

RNA A U G | U U U | U C G | C C A

makes

Protein



Protein Synthesis

Section Review Questions:

1. Describe the three main differences between RNA and DNA.
2. In DNA, adenine binds with _____ and guanine binds with _____.
3. In RNA, adenine binds with _____ and guanine binds with _____.
4. List the two main types of RNA, and explain what they do.
5. In your OWN words, describe what happens during transcription.
6. In your OWN words, describe what happens during translation.
7. How is protein synthesis different from DNA replication? *Think back to the cell cycle.*
8. Why is genetic code considered universal?
9. What does the term gene expression mean?
10. In what way does controlling the proteins in an organism control the organism's characteristics?