DNA Function part 2

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**Content Purpose**: Identify the function of a DNA molecule and protein synthesis.

RNA - Single strand

* Ribonucleic Acid
* 4 Nitrogen bases – A (adenine), U (uracil), G (guanine), C (cytosine)

Transcription is the process where RNA is made from DNA.

* It occurs in the nucleus.
* It uses mRNA (messenger ribonucleic acid) to copy information from DNA
* Carries genetic code from nucleus to the ribosomes in the cytoplasm.

Translation is the process of rRNA (ribosomal ribonucleic acid) translating the message carried by the mRNA into amino acids in the form of codons.

* tRNA (transfer ribonucleic acid) carries the amino acids and attaches them to the growing protein chain.

When protein production is completed the ribosome releases the polypeptide.

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How many different kinds of bases can be found on DNA \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?

What base is found on RNA but not on DNA? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How many bases are in a codon? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Transcription occurs in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Translation occurs in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

The process of making RNA from DNA is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and it occurs in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

The process of assembling a protein from RNA is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and it occurs in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.