Pracovný list

Predmet: Biológia
Názov tematického celku: Dedičnosť a premenlivosť organizmov
Názov učebnej látky: Prenos genetickej informácie
Trieda: Kvarta
Dátum: **6. 8. 2019**

Aktivita : Video s názvom How DNA transfer genetic information – From DNA to protein 3D

https://www.youtube.com/watch?v=gG7uCskUOrA

From DNA to protein - 3D

Task: Watch and listen the video and in the text below fill the gaps with the missing words.

Key words:
Cells, nucleus, genome, chromosomes, DNA, RNA, genes, protein, RNA polymerase, Mesenger RNA, Transfer RNA, transcription, cytoplasm, ribosomes, code, protein chain, amino acids, triplet,

Here is a cell the basic unit of all living tissue in most human .....There is a structure called a nucleus. The .....contains the genome in humans. The .....is split between 23pairs of chromosomes. Each ..... contains a long strand of DNA tightly packaged around ..... called histones. Within the ..... are sections called genes. These .....contain the instructions for making proteins. When a gene is switched on an enzyme called .....attaches to the start of the

gene. It moves along the DNA making a strand of .....out of free bases in the nucleus. The DNA code determines the order in which the free bases are added to the messenger RNA. This process is called ..... Before the messenger RNA can be used as a template for the production of proteins it needs to be processed. This involves removing and adding sections of RNA. The messenger RNA then moves out of the nucleus into the .....Protein factories in the cytoplasm called ..... bind to the messenger RNA. The ribosome reads the code in the messenger RNA to produce a ..... made up of .....There are 20 different types of amino acids. .....molecules carry the amino acids to the ribosome. The messenger RNA is read 3 bases at a time. As each ..... is read, a transfer RNA delivers the corresponding amino acid. This is added to a growing chain of amino acids, once the last amino acid has been added the chain folds into a complex 3d shape to form the protein.