

Protein Synthesis

Enduring Understandings

- The expression of DNA's code through protein synthesis directs life's activities.

Essential Questions

- How can a change in DNA's code affect living things?
- How does DNA's code expressed?

Targets

Vocabulary-- **RNA, Uracil, Single-Stranded, Ribose, Transcription, Translation, Gene Expression, RNA Polymerase, Messenger RNA, Codons, Genetic Code, Transfer RNA, Anticodon, Ribosome, Ribosomal RNA**

1. Be able to list the three main parts of every nucleotide and describe three ways in which DNA polymers differ from mRNA polymers.
2. Be able to list the major steps of transcription in order.
3. Be able to describe how ribosomes use mRNA, tRNA, and amino acids to manufacture a protein.
4. Given a sequence of bases on one DNA strand, be able to illustrate and explain the process of transcription, and / or translation.
5. Given a sequence of mRNA bases and an amino acid decoding table, be able to determine the order of amino acids coded for by the mRNA.
6. Be familiar with the types of chromosomal mutations.

BIOLOGY

Wed. [B]	2/7	Go over tests Homework—Read and notes p. 208-210
Thurs. [A]	2/8	RNA Structure/Transcription Transcription Reading Guide Homework—Transcription Reading Guide
Fri. [B]	2/9	Finish Transcription/Translation Discussion
Mon. [A]	2/12	Protein Synthesis Laserdisk DNA Dry Lab Homework—Read and notes p. 211-214;219-220
Tues. [B]	2/13	DNA Dry Lab
Wed. [A]	2/14	Protein Synthesis Animations Protein Synthesis Reading Guide Homework—Translation Reading Guide
Thurs.	2/15	Summary Discussion
Fri.	2/16	NO SCHOOL STUDENTS
Mon.	2/19	PRESIDENT'S DAY
Tues. [A]	2/20	Protein Synthesis Performance Assessment
Wed. [B]	2/21	Protein Synthesis Performance Assessment
Thurs. [A]	2/22	Protein Synthesis Performance Assessment