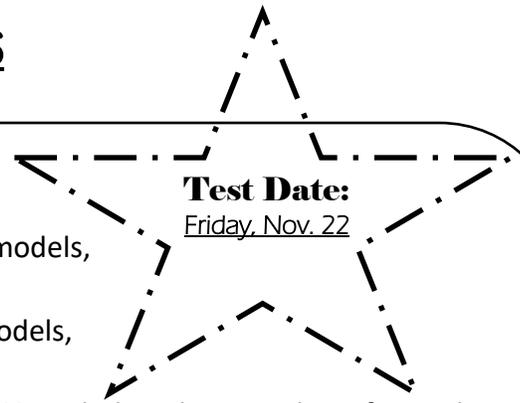


# Protein Synthesis Unit 6



## I CAN -

- 1. Describe the process and purpose of transcription using models, diagrams, and words. (6C)
- 2. Describe the process and purpose of translation, using models, diagrams, and words. (6C)
- 3. Compare the structures and roles of DNA, mRNA, and tRNA, including their number of strands, bases, locations in the cell, and purpose in protein synthesis. (6C)
- 4. Determine the amino acid sequence of a DNA sequence. (6C)
- 5. Interpret and explain how cell specialization/differentiation is controlled by gene expression. (5B)
- 6. Identify that gene expression is a regulated process. (6D)
- 7. Recognize and interpret situations where the environment affects the expression of genes. (5B)
- 8. Identify a mutation and name the type of mutation within a DNA strand. (6E)
- 9. Describe how mutations in the DNA sequence affects the amino acids in a protein. (6E)
- 10. Predict how a change in the DNA strand will affect the amino acid sequence of a protein. (6E)



**Test Date:**

Friday, Nov. 22

## Words to Know

Transcription, translation, protein synthesis, polypeptide, amino acid, rRNA, mRNA, tRNA, codon, anti-codon, ribosome, RNA polymerase, intron, exon, uracil, gene expression, mutation, frameshift mutation, insertion mutation, deletion mutation, point mutation, substitution mutation, cell differentiation

## Calendar

Monday 11/11	Tuesday 11/12	Wednesday 11/13	Thursday 11/14	Friday 11/15
<b><u>VETERANS DAY</u></b>  Cell Energy Quiz	<b><u>Topic:</u></b> Protein Synthesis <b><u>Activities:</u></b> Cell Energy Quiz Analysis Protein Synthesis explained - PP <b><u>By the end of the period I can:</u></b> 1, 2, 3	<b><u>Topic:</u></b> Protein Synthesis  <b><u>Activities:</u></b> Protein Synthesis explained - PP <b><u>BTEOTP I can:</u></b> 1,2,3,	<b><u>Topic:</u></b> Protein Synthesis <b><u>Activities:</u></b> Protein Synthesis drawing and article <b><u>By the end of the period I can:</u></b> 1, 2, 3, 4	<b><u>Topic:</u></b> Protein Synthesis <b><u>Activities:</u></b> Draw it to know it – Understanding Diagrams <b><u>BTEOTP I can:</u></b> 1, 2, 3, 4
Monday 11/18	Tuesday 11/19	Wednesday 11/20	Thursday 11/21	Friday 11/22
<b><u>Topic:</u></b> Cell Differentiation & Gene Expression <b><u>Activities:</u></b> Gene Regulation video & Bunny Article <b><u>By the end of the period I can:</u></b> 5, 6, 7	<b><u>Topic:</u></b> Gene Expression & Mutations <b><u>Activities:</u></b> Mutation Notes and Blocks <b><u>By the end of the period I can:</u></b> 5, 6, 7, 8, 9, 10	<b><u>Topic:</u></b> Mutations <b><u>Activities:</u></b> Mutations Practice Sheet <b><u>By the end of the period I can:</u></b> 5, 6, 7, 8, 9, 10	<b><u>Topic:</u></b> Review Cell Energy & Protein Synthesis Units <b><u>Activities:</u></b> Review Sheet/Game <b><u>BTEOTP I can:</u></b> ALL!	<b>Cell Energy &amp; Protein Synthesis Test</b>

\*\*\*\* This is a tentative calendar and subject to change.