Protein Synthesis/Gene Mutations

Marzano Framework Biology HS Start Date: December 05, 2011 End Date: December 23, 2011

Why is it important?

Enduring Understandings	Essential Questions	Key Vocabulary
	What are the roles of transcription and translation? What is the process of protein synthesis? How does the shape of a protein determine its function? How do mutations cause change in proteins that lead to evolution?	ribonucleic acid (RNA)
Summarize the process of transcription and translation. Compare the roles of mRNA, rRNA, and tRNA in translation.		transcription
		translation
		protein synthesis
		ribose
		messenger RNA (mRNA)
		ribosomal RNA (rRNA)
	Learning Targets: Explain transcription and its role. Explain translation and its role. Differentiate between the three types of RNA. Identify the shape of a protein and its function. Explain how mutations cause change in proteins that lead to evolution.	transfer RNA (tRNA)
		RNA polymerase
		promotor
		termination signal
		genetic code
		codon
		anticodon
		genome

Standards

OH_Academic_Content_Standards - Science (2011) - Biology

Content 1 Heredity

- 1.2 Structure and function of DNA in cells
- 1.3 Genetic mechanisms and inheritance
- 1.4 Mutations

Why am I teaching?

Unit Objectives

Summarize the process of transcription and translation. Compare the roles of mRNA, rRNA, and tRNA in translation.

What additional resources do I need?

Notes	Web 2.0 tools	Resources	

Marzano Framework Biology HS	
Start Date: December 05, 2011	
End Date: December 23, 2011	
	PowerPoint Notes
	DVD's
	Worksheets
	Lab: Protein Synthesis Model

Protein Synthesis/Gene Mutations

Monday December 05, 2011 - Protein Synthesis/Gene Mutations Marzano Framework Biology HS What am I planning for my lesson? Daily Objectives Daily Vocabulary Standards

What is my instruction for today?				
Marzano Instructional Strategies	Differentiated Instruction	Instructional Delivery		
Lesson Outline	Lesson Segment	Resources		

What are my additional thoughts regarding this lesson?

Reflection		

Standards Summary - Protein Synthesis/Gene Mutations

Marzano Framework Biology HS December 05, 2011 through December 23, 2011

Standards

OH_Academic_Content_Standards - Science (2011) - Biology Content 1 Heredity

- 1.2 Structure and function of DNA in cells
- 1.3 Genetic mechanisms and inheritance
- 1.4 Mutations