

**Daily Lesson Plans
Chapter 8--DNA to
proteins**

Academic Biology

Feb 25-Mar 1

**Mrs. Linda Henry
Unit: Heredity**

**Standards with
Objectives**

Activities

Evaluation

Enrichments

1.

3.1.10A5—relate life processes to cellular and sub-cellular levels structures and functions

Monday--go over packet and continue notes on DNA replication. Assign section 3 of the study guide packet

power notes and study guide for Chapter 8 DNA and protein synthesis

Try the standards based assessment for this chapter on page 209 of your textbook. Many of these will be similar to your Biology Keystone Exam questions later this year!

2. relate the history and discovery of DNA to the early scientists

Tuesday--go over HW, Notes on section 4 on transcription. Assign section 4 of study guide for HW

Genetic Science learning lesson on DNA and protein synthesis

Adaptations for activities and tutoring:

3. list the parts of the four nucleotides that make up DNA

Wednesday--go over HW and continue notes on section 5 on translation. Assign section 5 of study guide for HW

1. Concept map
2. Word search
3. Critical thinking essays
4. Flashcards
5. Section reviews
6. Chapter reviews
7. Read chapter highlights

4. explain the double helix and how it is arranged

5. describe DNA replication in the S phase of the cell cycle

Thursday--Friday--Genetic Science learning lesson on DNA, RNA and protein synthesis. Students will use their chromebooks to view, identify and assemble nucleic acids and proteins.

6. list and describe the part of RNA

7. differentiate between DNA and RNA

8. list and describe the three types of RNA

9. list and describe differences between transcription and translation

Daily Lesson Plans
Chapter 8--DNA to
proteins

Biology Laboratory
(Every other day)

Feb 25-Mar 1, 2019

Mrs. Linda Henry
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PA Academic
Standards and
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1. **3.1.10A5—relate life processes to cellular and sub-cellular levels structures and functions**
2. **3.1.10.A6—identify the advantages of multicellularity in organisms**
3. **analyze nuclear DNA and Mitochondrial DNA for crime scenes**

Recovering the Romanovs using DNA analysis

students will access www.dnai.org to view the information about the Romanovs and how their bodies were identified

Project: Recovering the Romanovs

Go Online! To HMDSscience.com For virtual labs, poison frogs and Biozine articles

Adaptations for activities and tutoring:

1. Concept map
2. Word search
3. Critical thinking essays
4. Flashcards
5. Section reviews
6. Chapter reviews
7. Read chapter highlights

Daily Lesson Plans Chapter 1--History of Microbiology	Introduction to Microbiology	Feb.25-Mar 1, 2019	Mrs. Linda Henry Unit: Background of Microbiology and the control of bacteria
PA Academic Standards and Objectives	Activities	Evaluations	Enrichment
3.1.10.A5—relate the life processes of cellular and subcellular structures to their function	Monday---go over packet and review for test	review for test	Try clinical applications on page 24-25 in your text for practice in higher critical thinking skills.
2. . recognize the system of naming bacteria	Tuesday--Test on Chapter 1 and then students will	Chapter 1 test	Adaptations for tutoring and activities: 1. Concept maps 2. Word search 3. Critical thinking essays 4. Flashcards 5. Section reviews 6. Chapter reviews 7. Read chapter highlight
3. differentiate between the major types of microbes	begin reading Chapter 3 on stains and microscopes	Notes on Ch. 3	
4. list the domains of microbes	Wednesday--Fri day--go over test and begin Chapter 3 on types of microscopes		
5. explain the importance of contributions of microscopes to microbiology	and viewing microbes		
6. list the steps in Koch's postulates			

Daily Lesson Plans Chapter 11- DNA profiling PA Academic Standards with Objectives	Introduction to Forensics (B days--every other day) Activities	Feb 25-Mar 1, 2019 Evaluations	Mrs. Linda Henry Unit:Individual evidence Enrichment
<p>1. 3,4,10.A-technology and how it impacts scientific endeavors</p> <p>2. 3.1.10.B4—explain how technologies have impacted the field of forensics.</p> <p>3. list the three main parts of the DNA molecule and explain how individualizes evidence at crime scenes</p> <p>4. describe the early process of</p>	<p>Monday--collect "Innocence project" with STR evidence. Review for test</p> <p>Wednesday--Mr. Zach Gaskin will be in to discuss forensics and his use of DNA profiling</p> <p>Friday--Test on DNA</p>	<p>Speaker on use of DNA profiling in forensics</p> <p>REview of DNA</p> <p>Test on Chapter 1</p>	<p>Try clinical applications on page 24-25 in your text for practice in higher critical thinking skills.</p> <p>Adaptations for tutoring and activities:</p> <ol style="list-style-type: none"> 1. Concept maps 2. Word search 3. Critical thinking essays 4. Flashcards 5. Section reviews 6. Chapter reviews 7. Read chapter highlights

**electrophoresis
of DNA**

- 5. differentiate
between RFLP
and STR**
- 6. explain PCR
and how it has
helped forensic
scientists to
analyze small
amounts of
DNA**
- 7.**

**Daily Lesson Plans
Chapter 1--**

Advanced Biology

May 14--18, 2018

**Mrs. Linda Henry
Unit:**

**PA Standards with
Objectives**

Activities

Evaluations

Enrichment

Header			
			<p>Try clinical applications on page 24-25 in your text for practice in higher critical thinking skills.</p> <p>Adaptations for tutoring and activities:</p> <ol style="list-style-type: none">1. Concept maps2. Word search3. Critical thinking essays4. Flashcards5. Section reviews6. Chapter reviews7. Read chapter highlights