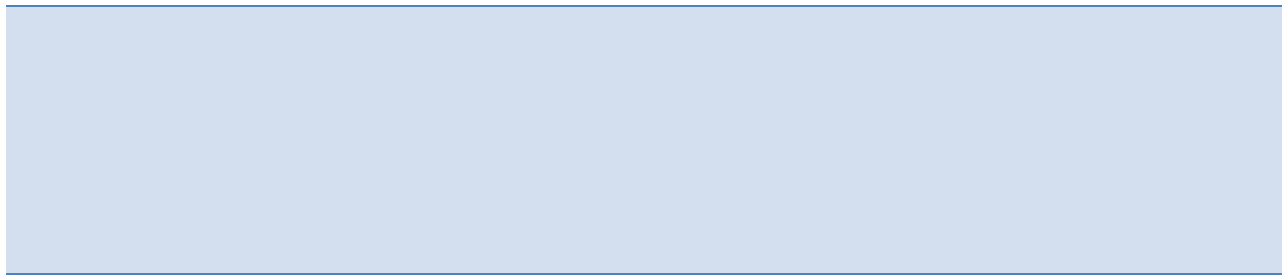


There will be NO School Monday Feb. 18th--Inservice Day for Teachers

| Daily Lesson Plans<br>Chapter 8--DNA to<br>proteins   | Academic Biology   | Feb 19--22,<br>2019   | Mrs. Linda Henry<br>Unit: Heredity   |
|---|--|---|--|
| Standards with<br>Objectives  | Activities   | Evaluation  | Enrichments  |
| 1. <b>3.1.10A5—relate life processes to cellular and sub-cellular levels structures and functions</b> | Monday--no school<br><br>Tuesday--pass out the power notes and study guides for Chapter 8--section 1 for notes and HW                        | 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                                    | Wednesday--describe the parts of the DNA molecule.   | Nucleic Acids packet  | Adaptations for activities and tutoring:   |
| 3. list the parts of the four nucleotides that make up DNA  | Section 2 of notes and study guide.  |   | 1. Concept map<br>2. Word search<br>3. Critical thinking essays  |
| 4. explain the double helix and how it is arranged  | Thursday--review the parts of the DNA molecule and then pass out the nucleic acids packet. Have students READ and answer questions about DNA |   | 4. Flashcards<br>5. Section reviews  |
| 5. describe DNA replication in the S phase of the cell cycle  | Friday--go over packet and continue notes on DNA replication. Assign section 3 of the study guide packet                                     |   | 6. Chapter reviews<br>7. Read chapter highlights   |
| 6. list and describe the part of RNA  | Friday--go over packet and continue notes on DNA replication. Assign section 3 of the study guide packet                                     |   |  |
| 7. differentiate between DNA and RNA  | Friday--go over packet and continue notes on DNA replication. Assign section 3 of the study guide packet                                     |   |  |
| 8. list and describe the three types of RNA   | Friday--go over packet and continue notes on DNA replication. Assign section 3 of the study guide packet                                     |   |  |
| 9. list and describe differences between transcription and translation                                | Friday--go over packet and continue notes on DNA replication. Assign section 3 of the study guide packet                                     |   |  |



|  |  |                                     |  |
|--|--|-------------------------------------|--|
| <b>Daily Lesson Plans</b><br><b>Chapter 8--DNA to</b><br><b>proteins</b>   | <b>Biology Laboratory</b><br><b>(Every other day)</b>  | <b>Feb 19-22, 2019</b>              | <b>Mrs. Linda Henry</b><br><b>Unit: Heredity</b>   |
| <b>PA Academic</b><br><b>Standards and</b><br><b>Objectives</b>  | <b>Activities</b>  | <b>Evaluations</b>                  | <b>Enrichment</b>  |
| 1. <b>3.1.10A5—</b><br><b>relate life</b><br><b>processes to</b><br><b>cellular and</b><br><b>sub-cellular</b><br><b>levels</b><br><b>structures and</b><br><b>functions</b> | Recovering the<br>Romanovs using<br>DNA analysis<br><br>students will access<br><a href="http://www.dnai.org">www.dnai.org</a> to<br>view the information<br>about the Romanovs<br>and how their bodies<br>were identified | Project: Recovering<br>the Romanovs | Go Online! To<br>HMDSscience.com<br>For virtual labs, poison<br>frogs and Biozine<br>articles<br><br>Adaptations for<br>activities and<br>tutoring:<br>1. Concept map<br>2. Word search<br>3. Critical<br>thinking<br>essays<br>4. Flashcards<br>5. Section<br>reviews<br>6. Chapter<br>reviews<br>7. Read chapter<br>highlights |
| 2. <b>3.1.10.A6—ide</b><br><b>ntify the</b><br><b>advantages of</b><br><b>multicellularit</b><br><b>y in organisms</b>   |  |                                     |  |
| 3. <b>analyze nuclear</b><br><b>DNA and</b><br><b>Mitochondrial</b><br><b>DNA for crime</b><br><b>scenes</b>   |  |                                     |  |





| <b>Daily Lesson Plans<br/>Chapter 1--History of<br/>Microbiology</b>                         | <b>Introduction<br/>to Microbiology</b>   | <b>Feb.19-22, 2019</b>       | <b>Mrs. Linda Henry<br/>Unit: Background of<br/>Microbiology and the<br/>control of bacteria</b>      |
|--|---|------------------------------|---|
| <b>PA Academic<br/>Standards and<br/>Objectives</b>  | <b>Activities</b>   | <b>Evaluations</b>           | <b>Enrichment</b>   |
| 3.1.10.A5—relate the life processes of cellular and subcellular structures to their function | Monday--no school   |                              | 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--go over virtual lab. Pass out the study guide for the chapter.               | Bacterial transformation lab | Adaptations for tutoring and activities:  |
| 3. differentiate between the major types of microbes   | Students will read and complete the sections on Chapter 1                             | Chapter 1 study guide        | 1. Concept maps   |
| 4. list the domains of microbes  |   |                              | 2. Word search  |
| 5. explain the importance of contributions of microscopes to microbiology                    | Wednesday--go over packet and review for test   | review for test              | 3. Critical thinking essays   |
| 6. list the steps in Koch's postulates   | Thursday--Test on Chapter 1   | Chapter 1 test               | 4. Flashcards   |
|  | Friday--go over test and begin Chapter 3 on types of microscopes and viewing microbes | Notes on Chapter 3           | 5. Section reviews  |
|  |   |                              | 6. Chapter reviews  |
|  |   |                              | 7. Read chapter highlight   |

| Daily Lesson Plans<br>Chapter 11- DNA<br>profiling                                 | Introduction to<br>Forensics (B<br>days--every other<br>day)       | Feb. 19-22, 2019                      | Mrs. Linda Henry<br>Unit:Individual<br>evidence  |
|--|--|---------------------------------------|--|
| PA Academic<br>Standards with<br>Objectives  | Activities   | Evaluations                           | Enrichment   |
| 1. <b>3,4,10.A-technology and how it impacts scientific endeavors</b>              | Tuesday and Thursday--Chapter review on DNA and genetic profiling. | Chapter 11 notes on DNA and profiling | Try clinical applications on page 24-25 in your text for practice in higher critical thinking skills.            |
| 2. <b>3.1.10.B4—explain how technologies have impacted the field of forensics.</b> | Thursday--Test on Chapter 1  | REview of DNA                         | Adaptations for tutoring and activities:<br><br>1. Concept maps<br>2. Word search<br>3. Critical thinking essays |

**3. list the three main parts of the DNA molecule and explain how individualizes evidence at crime scenes**

Test on Chapter 1

4. Flashcards
5. Section reviews
6. Chapter reviews
7. Read chapter highlights

**4. describe the early process of 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<br>Chapter 1-- | Advanced Biology | May 14--18, 2018 | Mrs. Linda Henry<br>Unit:  |
|-----------------------------------|------------------|------------------|--|
| PA Standards with<br>Objectives   | Activities       | Evaluations      | Enrichment   |
|                                   |                  |                  | <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"> <li>1. Concept maps</li> <li>2. Word search</li> <li>3. Critical thinking essays</li> <li>4. Flashcards</li> <li>5. Section reviews</li> <li>6. Chapter reviews</li> <li>7. Read chapter highlights</li> </ol> |