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| **Day 1**  **Lesson:** Biotechnology  Essential Question: How does biotechnology impact North Carolina and our world? | | **Day 2**  **Lesson:** Biotechnology | | **Day 3**  **Lesson:** Biotechnology | | **Day 4**  **Lesson:** Biotechnology | | **Day 5**  **Lesson:** Biotechnology |
| **Clarifying Objective:**  8.L.2.1: Summarize aspects of biotechnology including:   * Specific genetic information available * Careers * Economic benefits to North Carolina * Ethical issues   Implications for agriculture  **Academic Vocabulary:**  Biotechnology, genetic engineering, artificial selection, clone, forensic, ethics | | **Clarifying Objective:**  8.L.2.1: Summarize aspects of biotechnology including:   * Specific genetic information available * Careers * Economic benefits to North Carolina * Ethical issues   Implications for agriculture  **Academic Vocabulary:**  Biotechnology, genetic engineering, artificial selection, clone | | **Clarifying Objective:**  8.L.2.1: Summarize aspects of biotechnology including:   * Specific genetic information available * Careers * Economic benefits to North Carolina * Ethical issues   Implications for agriculture  **Academic Vocabulary:**  Biotechnology, genetic engineering, artificial selection, clone | | **Clarifying Objective:**  8.L.2.1: Summarize aspects of biotechnology including:   * Specific genetic information available * Careers * Economic benefits to North Carolina * Ethical issues   Implications for agriculture  **Academic Vocabulary:**  Biotechnology, genetic engineering, artificial selection, clone | | **Clarifying Objective:**  8.L.2.1: Summarize aspects of biotechnology including:   * Specific genetic information available * Careers * Economic benefits to North Carolina * Ethical issues   Implications for agriculture  **Academic Vocabulary:**  Biotechnology, genetic engineering, artificial selection, clone |
| **Bell Ringer:**  Discussion- Fruit Fancies pg 220  **Instructional Tasks:**  **Use Science Fusion (Module A- Cells and Heredity Unit 2 Lesson 7)**  **Pg. 218- 230 teacher pages**  **Student pages 161-169**  **Options:**  **-Read Unit 2 Lesson 7 pg. 218-230**  **-Powerpoint with skeletal notes**  **-Digital Lesson with skeletal notes**  **Summarizer:**  **3-2-1 on powerpoint notes or digital lesson**  **-3 things you liked, 2 new ideas you learned, 1 question you have.**  **\*\*\*Take it Home Worksheet found in Lesson Student Resources** | | **Bell Ringer:**  KWL chart on Biodiversity or  **Instructional Tasks:**  **-Continue/finish day 1 lesson**  **Card Sort- Found in teacher resources- vocabulary strategies.**  **Word Splash- Found in teacher resources- vocabulary strategies.**  **(use any strategy you like: ex- Frayer model, word triangle, Four Square, etc.)**  **Summarizer:**  **Create an Acrostic Poem using one of your vocabulary words. Make sure the words or sentences match the definition of the vocabulary word.**  **Card Sort and Word Splash can be used as summarizer.** | | **Bell Ringer:**  How does artificial selection differ from natural selection? ( answer on pg 227)  **Instructional Tasks:**  **Options:**  **-Students can take a “book walk” through the lesson. Each page of the student book has questions they will answer after reading each section. If using laptops, the program will read to the student. If laptops are not available, you can make a class set of the lesson for students to use.**  **-Activity- History of Corn pg 220**  **Discussion- Ethics Debate pg 220**  **~Activity- Genetically Engineering Plants- pg 220worksheet can be found online in Lesson Inquiry Resources.**  **Summarizer:**  Think-pair-Share will work for all activities listed. | | **Bell Ringer:**  Traditional plastics are made by petroleum, a nonrenewable resource. What benefit could plastic made by plants have over traditional plastic? (answer pg 228 #9)  **Instructional Tasks:**  **Series of 5 lessons: Biotechnology in NC from** [**http://kenanfellows.org/kfp-cp-sites/cp10/cp10/index.html**](http://kenanfellows.org/kfp-cp-sites/cp10/cp10/index.html)  **-Quick Lab- Observing Selective Breeding pg 221**  **- Quick Lab- How Can a Simple Code Be Used to Make a Product? Pg 221**  **Or pick an activity from a previous day.**  **Summarizer:**  **Review KWL chart from previous activity. Students should be able to fill in the learned column.** | | **Bell Ringer:**  How has biotechnology affected our world? (answer on pg 225)  **Instructional Tasks:**  **One Day Options-**  **-Lesson Review pg 169 Module A- Student Edition**  **~Complete the previous activity from the previous day.**  **Option 2- Two day activities-**  **Alternative Assessment- Fossil Hunters- pg 225**  **Summarizer:**  **Students could present their alternative assessment.**  **You can review the Lesson review as a class.** |
| **Assessment:** Observation/ Summarizer | | **Assessment:**  Observation | | **Assessment:** summarizer, observation | | **Assessment:** summarizer, observation/ | | **Assessment:** Observation |
| **Day 6**  **Lesson:** Biotechnology | |  | |  | |  |  |
| **Clarifying Objective:**  8.L.2.1: Summarize aspects of biotechnology including:   * Specific genetic information available * Careers * Economic benefits to North Carolina * Ethical issues   Implications for agriculture  **Academic Vocabulary:**  Biotechnology, genetic engineering, artificial selection, clone | | **Start a new Unit today.** | |  | |  |  |
| **Bell Ringer:**  **Instructional Tasks:**  **Teachers can take this day to re-teach a concept students did not understand, or pick an instructional task they were unable to get to at the time. This will help solidify student’s knowledge and prepare for benchmarks and/or end of unit test.**  **Option 2- Bill Nye the Science Guy- found on youtube. Biodiversity**  **or ParrMr also found on youtube. Hundreds of science songs.**  **Or Traditional test/ Quiz** | |  | |  | |  |  |
| **Assessment:** Observation/ summarizer | |  | |  | |  |  |