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| **Day 1**  **Lesson:** Diversity of Living Things.  Essential Question: What is the theory of evolution by natural selection? | | **Day 2**  **Lesson:** Diversity of Living Things. | | **Day 3**  **Lesson:** Diversity of Living Things. | **Day 4**  **Lesson:** Diversity of Living Things. | | **Day 5**  **Lesson:** Diversity of Living Things. |
| **Clarifying Objective:**  **8. L.4.1:** Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.  **Academic Vocabulary:**  Evolution, variation, adaptation, artificial selection, natural selection, extinction, mutation | | **Clarifying Objective:**  **8. L.4.1:** Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.  **Academic Vocabulary:**  Evolution, variation, adaptation, artificial selection, natural selection, extinction, mutation | | **Clarifying Objective:**  **8. L.4.1:** Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.  **Academic Vocabulary:**  Evolution, variation, adaptation, artificial selection, natural selection, extinction, mutation | **Clarifying Objective:**  **8. L.4.1:** Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.  **Academic Vocabulary:**  Evolution, variation, adaptation, artificial selection, natural selection, extinction, mutation | | **Clarifying Objective:**  **8. L.4.1:** Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.  **Academic Vocabulary:**  Evolution, variation, adaptation, artificial selection, natural selection, extinction, mutation |
| **Bell Ringer:**  What are some ways that animals can adapt and survive?  **Instructional Tasks:**  **Use Science Fusion (Module B- Diversity of Living Things)**  **Pg. 28- 41 teacher pages**  **Student pages 1525**  **Options:**  **-Read Unit 1 Lesson 2 pg. 28-41**  **-Powerpoint with skeletal notes**  **-Digital Lesson with skeletal notes**  **-Virtual Lab**  **Summarizer:**  **3-2-1 on powerpoint notes or digital lesson**  **-3 things you liked, 2 new ideas you learned, 1 question you have.** | | **Bell Ringer:**  How might having a shorter, heavier beak allow a bird to eat harder foods than a bird that has a longer, thinner beak? (Module B, Pg 37)  **Instructional Tasks:**  **Options-**  **-Continue/finish day 1 lesson**  **-Vocabulary activity on Theory of Evolution**  **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.)**  **-** **Quick Lab: The Opposable Thumb. Worksheet can be found online Module B- Lesson 2 in Lesson inquiry or on the CD.**  **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:**  **Uncovering student ideas in science. Vol. 4 (Keely)**   * **Biological evolution p.99**   **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- Virtual Lab- Module B – Unit 1-Lesson 2**  **~ Exploration Lab- Environmental Change and Evolution pg 31- Directed or guided inquiry.**  **Summarizer:**  Think-pair-Share will work for all activities listed. | **Bell Ringer:**  How does an inherited characteristic differ from an acquired characteristic? (answer in Module B, pg 38) or  **Uncovering student ideas in science. Vol. 4 (Keely)**   * **Adaptation p.113**   **Instructional Tasks:**  **Options-**  **Exploration Lab- Environmental Change and Evolution pg 31- Directed or guided inquiry.**  **WTL-**[**Science 6 8.2 How do Earth's plates help create landforms ?**](http://pearsonkt.com/cgi-bin/writeToLearn/teacher/displayText.cgi?textID=1335&classID=9685)  **WTL-**[**Continental Drift**](http://pearsonkt.com/cgi-bin/writeToLearn/teacher/displayText.cgi?textID=12&classID=9685)  **-Or choose an option from the previous three days that has not been completed.**  **Summarizer:**  **Review KWL chart from previous activity. Students should be able to fill in the learned column.** | | **Bell Ringer:**  Why do you think Darwin labeled the finch specimens with information about the islands on which he observed them? (Answer on page Module B page 37)  **Instructional Tasks:**  **One Day Options-**  **-Lesson Review pg 25 Module D- Student Edition**  **~Complete the previous activity from the previous day.**  **Option 2- Two day activities-**  **Alternative Assessment- Evolving Activities- pg 35**  **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:** Diversity of Living Things. | | **Day 7**  **Lesson: Evidence of Evolution**  **Essential Question: What Evidence supports the theory of evolution?** | **Day 8**  **Lesson: Evidence of Evolution** | | **Day 9**  **Lesson: Evidence of Evolution** | **Day 10**  **Lesson: Evidence of Evolution** |
| **Clarifying Objective:**  **8. L.4.1:** Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.  **Academic Vocabulary:**  Evolution, variation, adaptation, artificial selection, natural selection, extinction, mutation | | **Clarifying Objective:**  **8. L.4.1:** Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.  **8. L.4.2:** Explain the relationship between genetic variation and an organism’s ability to adapt to its environment.  **Academic Vocabulary:**  **Fossil, fossil record, extinction, geologic time scale, genus domain, species** | **Clarifying Objective:**  **8. L.4.1:** Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.  **8. L.4.2:** Explain the relationship between genetic variation and an organism’s ability to adapt to its environment.  **Academic Vocabulary:**  **Fossil, fossil record, extinction, geologic time scale, genus domain, species** | | **Clarifying Objective:**  **8. L.4.1:** Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.  **8. L.4.2:** Explain the relationship between genetic variation and an organism’s ability to adapt to its environment.  **Academic Vocabulary:**  **Fossil, fossil record, extinction, geologic time scale, genus domain, species** | **Clarifying Objective:**  **8. L.4.1:** Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.  **8. L.4.2:** Explain the relationship between genetic variation and an organism’s ability to adapt to its environment.  **Academic Vocabulary:**  **Fossil, fossil record, extinction, geologic time scale, genus domain, species** |
| **Bell Ringer:**  **Science Formative Assessment 75 practical strategies (Keeley)**   * **Commit and toss p.65** * **Focused listening. p.95**   **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. Evolution**  **or ParrMr also found on youtube. Hundreds of science songs.**  **-Traditional Test/ Quiz**  ***-Project Learning Tree*: Activity 9 ,10, 11**  ***-Project Wild:***  ***“*Who Fits Here?” p. 64**  **Summarizer-**  **Depends on the activity chosen** | | **Bell Ringer:**  **Daily Demo- Module B pg 47. You can substitute a live animal for a youtube clip. Directions are in the Science Fusion book.**  **Instructional Tasks:  Use Science Fusion (Module B- Diversity of Living Things) Unit 1 Lesson 3**  **Pg. 44- 56 teacher pages**  **Student pages 29-37**  **Options:**  **-Read Unit 1 Lesson 3 pg. 44-56**  **-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 available under Module B-Unit1-Lesson 3 student activity or on the CD** | **Bell Ringer:**  **KWL- Chart on Fossils or**  **How can scientist tell, based on rock layers, which fossils are younger and which are older? (answer in Module B pg 53)**  **Instructional Tasks:**  **-Continue/finish day 1 lesson**  **-Vocabulary activity on Geological Change Over Time**  **Card Sort- Found in teacher resources- vocabulary strategies.**  **Word Splash- Found in teacher resources- vocabulary strategies.**  **-Field Lab- Mystery Footprints. Module B pg 47. This activity will take up to two class periods.**  **(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:**  **Probing Questions: Catacean Similarities. Module B pg 46**  **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.**  **~Quick Lab- Genetic Evidence for Evolution- worksheet can be found online in Lesson Inquiry Resources.**  **Quick Lab- Comparing Anatomy. worksheet can be found online in Lesson Inquiry Resources**  **Summarizer:**  **Graphic Organizer- Cluster Diagram, Venn Diagram, Concept Mapping, Main Idea Web.**  **Choose a graphic organizer for students to complete their ideas of the concept they are learning.** | **Bell Ringer:**  **Besides pelvic and leg bones, what similarities do you see between the skeletons of modern whales and the skeleton of whale ancestors? ( show students a picture)**  **Instructional Tasks:**  **Option 1-**  **-Lesson Review- Unit 1 Lesson 3 pg 37 in student workbook.**  **Alternative assessment- Prove It! Pg 51**  **Option 2- Continue to Next lesson.**  **Use Science Fusion (Module B- Diversity of Living Things) Unit 1 Lesson 4**  **Pg. 58- 71 teacher pages**  **Student pages 39-49**  **Options:**  **-Read Unit 1 Lesson 3 pg. 58-71**  **-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.** |
| **Assessment:** Observation/ summarizer | | **Assessment:**  Observation | **Assessment:** summarizer, observation | | **Assessment:** summarizer, observation/ | **Assessment:** Observation |

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| **Day 11**  **Lesson: History of Life on Earth**  **Essential Question: How has life on Earth changed over time?** | **Day 12**  **Lesson: History of Life on Earth** | **Day 13**  **Lesson: History of Life on Earth** | **Day 14**  **Lesson: History of Life on Earth** | **Day 15**  **Lesson: History of Life on Earth** |
| **Clarifying Objective:**  **8. L.4.1:** Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.  **8. L.4.2:** Explain the relationship between genetic variation and an organism’s ability to adapt to its environment.  **Academic Vocabulary:**  **Fossil, fossil record, extinction, geologic time scale, genus domain, species** | **Clarifying Objective:**  **8. L.4.1:** Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.  **8. L.4.2:** Explain the relationship between genetic variation and an organism’s ability to adapt to its environment.  **Academic Vocabulary:**  **Fossil, fossil record, extinction, geologic time scale, genus domain, species** | **Clarifying Objective:**  **8. L.4.1:** Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.  **8. L.4.2:** Explain the relationship between genetic variation and an organism’s ability to adapt to its environment.  **Academic Vocabulary:**  **Fossil, fossil record, extinction, geologic time scale, genus domain, species** | **Clarifying Objective:**  **8. L.4.1:** Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.  **8. L.4.2:** Explain the relationship between genetic variation and an organism’s ability to adapt to its environment.  **Academic Vocabulary:**  **Fossil, fossil record, extinction, geologic time scale, genus domain, species** | **Clarifying Objective:**  **8. L.4.1:** Summarize the use of evidence drawn from geology, fossils, and comparative anatomy to form the basis for biological classification systems and the theory of evolution.  **8. L.4.2:** Explain the relationship between genetic variation and an organism’s ability to adapt to its environment.  **Academic Vocabulary:**  **Fossil, fossil record, extinction, geologic time scale, genus domain, species** |
| **Bell Ringer:**  Probing Question: Fossil Sequences. Module B-Unit 1- Lesson 4 pg 60  **Instructional Tasks:**  **Options-**  **-Continue/finish day 1 lesson**  **-Vocabulary activity on Theory of Evolution**  **-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- Daily Demo- Living Fossils. Module B – Unit 1-Lesson 2**  **~ Quick Lab- How Do We Know What Happened When? Pg 61**  **-Quick Lab- Investigate Relative and Absolute Age pg 61**  **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.**  **Venn Diagram** | **Bell Ringer:**  **Why are rock layers near Earth’s surface generally younger than rock layers below them? (answer on pg 67 Module B)**  **Instructional Tasks:**  **Options:**  **-Complete an activity from the previous day.**  **-**[**Cells and Heredity: 5.1 Darwin's Theory**](http://pearsonkt.com/cgi-bin/writeToLearn/teacher/displayText.cgi?textID=136&classID=9685)  **-Activity- Daily Demo- Living Fossils. Module B – Unit 1-Lesson 2**  **~ Quick Lab- How Do We Know What Happened When? Pg 61**  **-Quick Lab- Investigate Relative and Absolute Age pg 61**  **-Activity- What’s in a name? pg 80**  **Summarizer:**  Think-pair-Share will work for all activities listed.  \*\***\*\*Take it Home Worksheet available under Module B-Unit1-Lesson 4 student activity or on the CD** | **Bell Ringer:**  Of the time periods shown in the Geological Time Graphic, which period do you think we’ve learned the most about through fossil records? Explain. (pg 68)  **Instructional Tasks:**  **\*\*\*When looking at Unit 1- Lesson 5, it is not necessary to go over the entire chapter. Students do not need to know the actual classification names; they only need to know there is a classification system and the importance of having one. This is why I have only allotted one day to this section.\*\*\***  **Module B- Unit 1- Lesson 5**  **Options-**  **-Virtual Lab**  **-Digital Lesson with notes**  **-Quick Lab- Using a Dichotomous Key pg 77.**  **- Exploration Lab- Developing Scientific Names pg 77**  **Summarizer:**  **Review KWL chart from previous activity. Students should be able to fill in the learned column.** | **Bell Ringer:**  How does DNA lead scientists to better classify organisms? (DNA indicates characteristics that may not be visible to scientists. It is also more objective than observation. A red panda looks a bit like a giant panda, but its DNA indicates thatthey are not as similar as they look)  **Instructional Tasks:**  **One Day Options- (Review Day)**  **-Lesson Review pg 49 Module B- Student Edition**  **-Lesson Review pg 67- student edition**  **~Complete the previous activity from the previous day.**  **-Alternative Assessment- Classifying- pg 81**  **\*\*\*Unit 1 Review pg 70-74**  **Summarizer:**  **Students could present their alternative assessment.**  **You can review the Lesson review as a class.** | **Bell Ringer:**  **Why do people need a universal system of naming organisms? (Having a universal naming system allows people speaking different languages to refer to all animals in the same way)**  **Instructional Tasks:**  **-Traditional Test/ Quiz**  **- Alternative Tests listed previously.**  **-Unit Tests A or B on CD or in assessments online Module B**  **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.** |
| **Assessment:** Observation | **Assessment:**  Observation | **Assessment:** summarizer, observation | **Assessment:** summarizer, observation/ | **Assessment:** Observation |