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| Title | Lesson 1 – What’s the Pollinator Problem? |
| Overview | Student will read two articles highlighting the decline of pollinators and will discuss the issues presented in the articles and identify the problem surrounding pollinators and why people should be concerned. |
| Standards | **English Language Arts**  ELA.3R.C1.4 Ask and answer questions to demonstrate understanding of an informational text, referring explicitly to the text as the basis for the answers.  ELA.3R.C1.5 Determine the main idea of an informational text; recount the details and explain how they support the main idea.  ELA.3.R.C1.6 Describe the relationship between a series of historical events, scientific ideas or concepts or steps in technical procedures in an informational text, using language that pertains to time, sequence and cause/effect.  ELA.3.R.C2.4 Determine the meaning of general academic and domain-specific words and phrases in an informational text relevant to a grade 3 topic or subject area.  ELA.3.R.C3.4 Describe the logical connection between particular sentences and paragraphs in an informational text (e.g., comparison, cause/effect, first/second/third in a sequence).  ELA.3.SL.C13.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, teacher-led) with diverse partners on grade 3 topics and texts, building on others’ ideas and expressing their own clearly.  ELA.3.SL.C13.2 Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively and orally.  ELA.3.W.C9.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly  **Science and Engineering Practices**   * Asking Questions and Defining Problems * Constructing Explanations and Designing Solutions * Obtaining, Evaluating, and Communicating Information   **21st Century Learning**  21C.S.3-4.2 The student will demonstrate the ability to explore and develop new ideas, to intentionally apply sound reasoning processes and to frame, analyze and solve complex problems using appropriate technology tools. |
| Materials/Advance Preparation Needed | **Materials:**  **Choose 2 articles focusing on pollinator/bee decline.**   * *TIME for Kids* article: Honeybee Mystery. Edition 2. November 2013 * *National Geographic Young Explorer Kids* article: Meet the Pollinators:   <http://ngexplorer.cengage.com/ngyoungexplorer/1004/readstory.html>   * *Science News for Kids* article: Where Have All the Bees Gone? <https://student.societyforscience.org/article/where-have-all-bees-gone> * TIME for Kids article: The Case of the Missing Bees <http://www.timeforkids.com/news/case-missing-bees/11806> * The mystery of the missing bees. *Know Your World Extra.* 12/07/2007, Vol. 41 Issue 6, p6-7. * Pollinators Plummet. *Current Science.* 01/19/2007, Vol. 92 Issue 10, p14-15.   **Advance Preparation:**  Decide if you want to have students read article individually or as a whole group. Articles can be projected and read as a class to save paper. |
| Procedures/Steps:  (Emphasis on students making inquiry, e.g., posing questions/problems and working towards answers and solutions) | **Introduction:**   * Write this question on the board: “What is the pollinator problem?” * Explain to the class that they are going to read two articles highlighting the current issue with pollinators.  1. **Whole group:** Read article # 1. 2. **Small group/partners:** Have students work together to determine main idea of article and to identify supporting details using What? So What? Now What? strategy: After reading the text, have write/share reflections based on the following:   ***What?*** – What did you learn?  ***So what?*** – Reflect upon the learning. How is it relevant or why is it important?  ***Now what?*** – Consider ways to extend the learning to other situations.  Students should record their ideas on paper. 1 per group.   1. **Whole group**: Allow each group to share their ideas. Record on chart paper. 2. Repeat steps 1-3 with the second article. 3. Identify and review any new/domain-specific vocabulary words. These should be posted to a word wall. 4. Have students write a short explanation answering the question *what is the pollinator problem,* in their own words. This will be the first entry in their science notebooks (next lesson). |
| Assessment (What will be the evidence of student learning?) | Teacher will assess students’ written explanations |