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| **Lesson Title**: **Ecosystems**  **Created by: Amy Elston** | | | **NRS Level of Lesson: 2 & 3**  **(180 minutes Can be chunked into sections)** |
| **Intended Modality:** (check all that apply)  X In-person X Virtual X Hybrid | | | |
| **Content Area(s)** | **Targeted** [**IL ABE/ASE Content Standards**](http://www.excellenceinadulted.com/resources/abease-curriculum-project/) | | |
| **Reading** | **3.R.VA.1** Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on level appropriate reading content, choosing flexible from a range of strategies  **c** Consult reference materials (e.g. dictionaries, glossaries, thesauruses) both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases. | | |
|  | **3.R.CI.7** Integrate information from two texts on the same topic in order to write or speak about the subject knowledgably | | |
|  | **3.R.CI.8** Draw on information from multiple print or digital sources, demonstrating the ability to locate specific information to a question quickly or to solve a problem efficiently | | |
|  | **3.R.CI.1e** Explain the relationships or interaction between two or more individual, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text. Use language that pertains to time, sequence, and cause/ effect. | | |
| **Writing** | **2.W.RB.1** Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories. | | |
|  | **2.W.RB.2** Participate in shared research and writing projects. Record information needed to prepare report.  **Or**  **2.W.RB.3** Conduct short independent research projects that build knowledge about a topic. | | |
| **Speaking and Listening** | **2.S.CC.1** Engage effectively in a range of collaborative discussions (one on one, small and large groups, and teacher-led) with diverse partners on topics and texts.  **b.** Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). | | |
|  | **2.S.PK.1** Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly and clearly at an understandable pace in coherent sentences. | | |
| **Integrated** [**Essential Employability Skills**](https://www.illinoisworknet.com/DownloadPrint/ILEssentialEmployabilitySkills-Handout.pdf) | | | |
| X Personal Ethic *(Integrity, Respect, Perseverance, Positive Attitude)* | | X Teamwork *(Critical Thinking, Effective & Cooperative Work)* | |
| □ Work Ethic *(Dependability, Professionalism)* | | X Communication *(Active Listening, Clear Communication)* | |
| **Lesson Objectives *(Students will be able to)****:*   * Use both print and digital tools to find meanings of words * Analyze and explain the cycle as illustrated in a diagram * Identify the sequence of events and how they affect one another * Conduct research using valid and relevant resources about topic * Present a research project using graphics to assist in presentation | | | |
| **Engagement is not “one size fits all.” How are you providing multiple ways to engage all learners? Click on** [**Multiple Means of Engagement**](https://udlguidelines.cast.org/engagement) **to learn more about providing options for learners and explain how you are including this below:**  **Lesson Activity 1)** Videos at own pace and review at leisure  **Lesson Activity 2)** Choose digital or print dictionary  **Lesson Activity 4a)** Students choose self-paced or instructor guided  **Lesson Activity 4b)** Students choose to work with a partner or independently | | | |
| **Key Vocabulary**:  Ecosystem cycle interactions process matter consume  primary rely secondary | | | |
| **Instructional Materials:**  Textbooks or online curriculum:   * Dictionaries ([**digital**](https://www.dictionary.com/)and print) <https://www.dictionary.com/>   [**The Ecosystem (K12 Libretexts)**](https://docs.google.com/document/d/1ph6GjJ7uKmFa74XPJQT4XgrpmcvZMVcVkjqh4bQCRBg/edit?usp=sharing)  <https://docs.google.com/document/d/1ph6GjJ7uKmFa74XPJQT4XgrpmcvZMVcVkjqh4bQCRBg/edit?usp=sharing>  Resource Handouts   * [**Ecosystem Research Project**](https://docs.google.com/document/d/12RgD6ja4HTxjVCSR7Kg_QuTF9fuFh5lpfgi8vvJ5Yck/edit?usp=sharing)   <https://docs.google.com/document/d/12RgD6ja4HTxjVCSR7Kg_QuTF9fuFh5lpfgi8vvJ5Yck/edit?usp=sharing>   * [**Team Contract**](https://docs.google.com/document/d/1wNusD5dyEC1iREc5h0QX6cVTe8pS71OQ9HwWhUKPrbc/edit?usp=sharing)   <https://docs.google.com/document/d/1wNusD5dyEC1iREc5h0QX6cVTe8pS71OQ9HwWhUKPrbc/edit?usp=sharing>   * [**C.R.A.P handout**](https://drive.google.com/file/d/1RuUZsV35DXxg2rFVs7Mws-Ygk8LBbok9/view?usp=sharing)   <https://drive.google.com/file/d/1RuUZsV35DXxg2rFVs7Mws-Ygk8LBbok9/view?usp=sharing>   * [**Tips for Successful Internet Searches**](https://docs.google.com/document/d/11pioS0ac5ZXLewJXmLNlwwZ4pd7kmQteo71PqGToXMw/edit?usp=sharing)   <https://docs.google.com/document/d/11pioS0ac5ZXLewJXmLNlwwZ4pd7kmQteo71PqGToXMw/edit?usp=sharing>   * [**Ecosystem Note Taking Graphic Organizer**](https://docs.google.com/document/d/12HKtkX4uOm8v7z-35oQN1ffCv_TEviki4UJ6hYILzW0/edit?usp=sharing)<https://docs.google.com/document/d/12HKtkX4uOm8v7z-35oQN1ffCv_TEviki4UJ6hYILzW0/edit?usp=sharing> * [**Graphic Organizer for Paragraph Summary**](https://docs.google.com/document/d/1J-fX8woYNoBKICRLNPsxRaylyCV7aqrSAilTOA7pRaE/edit?usp=sharing)   <https://docs.google.com/document/d/1J-fX8woYNoBKICRLNPsxRaylyCV7aqrSAilTOA7pRaE/edit?usp=sharing>  Websites:   * [**Readworks.org**](https://www.readworks.org/) (create a free account or print articles) <https://www.readworks.org/> * [**CommonLit**](https://www.commonlit.org/en/library?contentTypes=text&initiatedFrom=library)(create a free account or print articles)<https://www.commonlit.org/en/library?contentTypes=text&initiatedFrom=library> * [**Flipgrid**](https://info.flipgrid.com/) (create a free account to allow students to video record/ present)<https://info.flipgrid.com/>   Videos:   * [**What is an Ecosystem?**](https://www.youtube.com/watch?v=aYmdrJWLQ4Y)   <https://www.youtube.com/watch?v=aYmdrJWLQ4Y> | | | |
| **Lesson Activities:**   1. **Introduce Ecosystem by showing video** [**What is an Ecosystem?**](https://www.youtube.com/watch?v=aYmdrJWLQ4Y) **to whole class or allow students to watch individually. Place all videos in a student accessible video library (Allowing students to watch videos individually provides students the option to control video speed, turn on closed captioning, and rewatch).** 2. **Create a word web on white board brainstorming word ECOSYSTEM. (students can offer suggestions orally, or write on board)** 3. **Have students use digital dictionaries to define any unknown words on word web.**      1. **Explore use of print and** [**digital dictionaries**](https://www.dictionary.com/) **to define Key Vocabulary words.** 2. **Students work with partners or individually using print and digital dictionaries to find word meanings.** 3. **Have students add definitions, synonyms, or antonyms to Jamboard (create a slide for each vocabulary word and share link with students to contribute to the Jamboard. Another option for in-person classes is to have students add post-its with the same information to posters displaying each word around the room.)** 4. **Students add to five slides either a sentence properly using the word or a picture that represents the word.** 5. **Individually, with a partner, or in a small group, read and answer questions to** [**The Ecosystem (K12 Libretexts)**](https://docs.google.com/document/d/1ph6GjJ7uKmFa74XPJQT4XgrpmcvZMVcVkjqh4bQCRBg/edit?usp=sharing) **(to listen to text** [**Use Read Aloud: A Text to Speech Voice Reader)**](https://chrome.google.com/webstore/detail/read-aloud-a-text-to-spee/hdhinadidafjejdhmfkjgnolgimiaplp/related?hl=en) **Review responses as a whole class and discuss those that need clarity** 6. **Ecosystem research project** 7. **Introduce project details** [**Ecosystem Research Project**](https://docs.google.com/document/d/12RgD6ja4HTxjVCSR7Kg_QuTF9fuFh5lpfgi8vvJ5Yck/edit?usp=sharing) 8. **Discuss working in a team/ with a partner and share** [**Team Contrac**t](https://docs.google.com/document/d/1wNusD5dyEC1iREc5h0QX6cVTe8pS71OQ9HwWhUKPrbc/edit?usp=sharing) **-complete mock contract together** 9. **Discuss Internet research tips review** [**C.R.A.P handout**](https://drive.google.com/file/d/1RuUZsV35DXxg2rFVs7Mws-Ygk8LBbok9/view?usp=sharing) **and** [**Tips for Successful Internet Searches**](https://docs.google.com/document/d/11pioS0ac5ZXLewJXmLNlwwZ4pd7kmQteo71PqGToXMw/edit?usp=sharing) **with students (remind students of Read Aloud option)** 10. **Discuss** [**Ecosystem Note Taking Graphic Organizer**](https://docs.google.com/document/d/12HKtkX4uOm8v7z-35oQN1ffCv_TEviki4UJ6hYILzW0/edit?usp=sharing) **to guide students through video watching.** (It may be beneficial to watch one of the extra videos from the notes section below and complete the graphic organizer together as a class. Remind students of options for closed captioning, audio speed, and brightness) 11. **Provide** [**Graphic Organizer for Paragraph Summary**](https://docs.google.com/document/d/1J-fX8woYNoBKICRLNPsxRaylyCV7aqrSAilTOA7pRaE/edit?usp=sharing)(It may be beneficial to walk the students through the use of this organizer, especially if this is one of the first writings students have attempted.) 12. **Give students the option of creating a digital or print poster illustrating the ecosystem they selected.** 13. **Give students the option of presenting their projects in person, or through flipgrid presentations.** | | | |
| **Learners vary in the way that they react to and grasp information that is presented to them. Click on** [**Multiple Means of Representation**](https://udlguidelines.cast.org/representation) **to explore ways that you can provide options for representing content and explain how you are including this below:**  **Lesson Activity 1)** Videos select speed and closed captioning option/ Video also provides background information  **Lesson Activity 2a)** Choose digital or print dictionary  **Lesson Activity 3)** Students choose to listen to text or read independently (Chrome “Read Aloud app)  **Lesson Activity 4d**) All videos for research can be used with closed caption and all text can use the Google Read Aloud Option) | | | |
| **Performance Tasks:**   * **Students use research to write description of ecosystem and energy flow in the ecosystem** * **Students create a graphic of researched ecosystem** * **Students present ecosystem research.** | | | |
| **Learners best express what they know in different ways. Click on** [**Multiple Means of Action & Expression**](https://udlguidelines.cast.org/action-expression) **to explore ways to offer options for learners and explain how you are doing this below:**  **Lesson Activity 2b)** Offer pictorial or written meanings of words  **Lesson Activity 4d,e)** Use of graphic organizers    **Lesson Activity 4f)** Students can create digital or hardcopy of final project  **Lesson Activity 5)** Students can present through recording (flipgrid) or live presentation | | | |
| **Notes:**   * **Use guiding questions and graphic organizers as needed** * **Consider prior student knowledge regarding research, and ecosystems; adjust time spent as necessary** * **The lesson could be shortened by removing the end project and simply having students complete the graphic organizers.** * **The Vocabulary activity could be isolated and used at another time with other words as well.** * **Below are videos that can be shared with students to explore various ecosystems**   **Extra Videos:**  [**What is an Ecosystem?**](https://www.youtube.com/watch?v=aYmdrJWLQ4Y)  [**Producers, Consumers, Decomposers - FreeSchool**](https://www.youtube.com/watch?v=bJEToQ49Yjc&t=319s)  [**Episode 1: What is an Ecosystem**](https://www.youtube.com/watch?v=7cRgK0qG00E)  [**Episode 2: The Forest Ecosystem**](https://www.youtube.com/watch?v=ivqfnOhwcYY)  [**Episode 3: The Grassland Ecosystem**](https://www.youtube.com/watch?v=xeQyq_fsurI)  [**Episode 4: The River Ecosystem Part 1**](https://www.youtube.com/watch?v=x2sV9Wz5Nvs)  [**Episode 4: The River Ecosystem Part 2**](https://www.youtube.com/watch?v=rLUo6jXoeOc)  [**Episode 5: The Wetland Ecosystem**](https://www.youtube.com/watch?v=Jcbmc_A7vy0)  [**What are Tundras**](https://www.youtube.com/watch?v=RT6x5GVPFG8)**?** | | | |