Project Essential Questions
- Why are producers/consumers/decomposers an important part of the ecosystem?
- What happens when you have an increase or decrease of producers/consumers/decomposers in an ecosystem?
- What are examples of energy sources in an ecosystem?
- What are biotic/abiotic factors in an environment?

PROJECT DESCRIPTION
In this project, students will depict their individual versions of an Impressionistic oil based painting after studying the Water Lily series by Claude Monet. The students will paint on stretched canvas, creating an ecosystem much like the one that Monet depicted in his Gardens in Giverny in France. Students will review what an ecosystem consists of, paying close attention to consumers, producers, and decomposers. They will concentrate on painting the various types of consumers, producers, and decomposers as well as their energy sources in their Garden ecosystem.

LEARNING TARGETS
“I Can…”
- Identify consumers, producers, and decomposers
- Explain energy sources
- Use Impressionistic techniques while painting an ecosystem

www.artsnowlearning.org
Units provide differentiated ideas and activities aligned to a sampling of standards. The units do not necessarily imply mastery of standards, but are intended to inspire and equip educators.

Produced through the U.S. Department of Education: Arts in Education—Model Development and Dissemination Grants Program Cherokee County (GA) School District and ArtsNow, Inc.
DURATION: 1-2 days

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ESSENTIAL QUESTIONS

- Why are producers an important part of the ecosystem?
- What happens when you have an increase or decrease of producers in an ecosystem?
- Why are consumers an important part of the ecosystem?
- What happens when you have an increase or decrease of consumers in an ecosystem?
- Why are decomposers an important part of the ecosystem?
- What happens when you have an increase or decrease of decomposers in an ecosystem?
- What are examples of energy sources in an ecosystem?
- What are abiotic factors in an environment?
- What are biotic factors in an environment?

STANDARDS

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| S4L1. Students will describe the roles of organisms and the flow of energy within an ecosystem  
  a. Identify the roles of producers, consumers, and decomposers in a community 
  d. Predict effects on a population if some of the plants or animals in the community are scarce or if there are too many | VA4CU.2. Views and discusses selected artworks  
  a. Identifies elements, principles, themes, and/or time period in a work of art |
|                      | VA4PR.1. Creates artworks based on personal experience and selected themes  
  e. Creates representational artworks from direct observation (e.g., landscape, still life, portrait) | VA4PR.2. Understands and applies media, techniques, and processes of two-dimensional art processes (drawing, painting, printmaking, mixed-media) using tools and materials in a safe and appropriate manner to develop skills  
  e. Creates paintings with a variety of media (e.g., tempera, watercolor, acrylic) |
Exploring Ecosystems  
Monet’s Water Lily Ecosystem  
4th Grade

KEY VOCABULARY

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<th>Content Vocabulary</th>
<th>Arts Vocabulary</th>
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<tbody>
<tr>
<td>● Ecosystem</td>
<td>● Background</td>
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<td>● Biotic</td>
<td>● Color</td>
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<tr>
<td>● Abiotic</td>
<td>● Emphasis</td>
</tr>
<tr>
<td>● Consumer</td>
<td>● Subject Matter</td>
</tr>
<tr>
<td>● Producer</td>
<td>● Texture</td>
</tr>
<tr>
<td>● Decomposer</td>
<td>● Impressionist</td>
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<td>● Energy source</td>
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TECHNOLOGY INTEGRATION

- [https://www.youtube.com/watch?v=JdL84LVwv7w](https://www.youtube.com/watch?v=JdL84LVwv7w) (This Youtube video takes you on a tour of many of Claude Monet’s Water Lily paintings. 6 minutes/55 seconds)
- [https://www.youtube.com/watch?v=BJE4QUNqaeo](https://www.youtube.com/watch?v=BJE4QUNqaeo) (This Youtube video is a real film of Claude Monet painting in his Garden in Giverny in France in 1915. 2 minutes/45 seconds)
- [https://www.youtube.com/watch?v=O2KGkK2wcbk](https://www.youtube.com/watch?v=O2KGkK2wcbk) (This Youtube video takes you on a tour of Monet’s gardens in Giverny, France. 4 minutes 3 seconds)

ASSESSMENTS

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<th>Formative</th>
<th>Summative</th>
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| ● Teacher can make observations for class participation during all of the class discussions. | ● Monet Style Ecosystem Painting  
● **Monet Style Ecosystem Painting Rubric** (see Downloads)  
● **Reflection Questions** (see Downloads) |

MATERIALS

Stretched canvas, one per student; oil based paints; various sizes of paint brushes

**Activating Strategy**

- The students will view 2 separate video clips of Claude Monet painting in his flower garden as well as a clip that allows the class to see many of Monet’s various versions of his *Water Lily* series.
- Share the following information with the class: *Water Lilies* is a series of approximately 250 oil paintings by French Impressionist Claude Monet. The paintings depict Monet’s flower garden at Giverny and were the main focus of Monet's artistic production during the last thirty years of his life.
Main Activity

**Part 1:**
- As a whole group, view “Claude Monet’s Garden” 4 minutes 3 seconds [https://www.youtube.com/watch?v=O2KGkK2wcbk](https://www.youtube.com/watch?v=O2KGkK2wcbk). In order to cut down on time, you could view the clip from the 1 minute 55 second mark till the 3 minute 6 second, as this part of the video focuses on the ponds and water lily plants.
- Pause the video clip every once in awhile to ask the class what types of ecosystems they see. Create a list of the producers, consumers, and decomposers that inhabit these gardens.
- Once the list is complete, ask the students where the producers, consumers, and decomposers received their energy. What is their energy source?

**Part 2:**
- Discuss with the class the artistic methods Monet used in his paintings. (Big brush strokes, heavy use of oil based paint, etc.) This would be a good opportunity to ask the visual arts teacher at your school for assistance.
- Each student will receive a stretched canvas, along with paint brushes and oil based paints.
- The students will paint their own version of Monet’s water lilies. They will include a water source, plants, as well as animals that may live in this type of habitat. In essence they will be creating an ecosystem with consumers, producers, and decomposers. The students must also include the energy sources as well in their painting.
- Once the paintings have dried, host a “Gallery Walk” with the class. The students will take a tour of each painting. As they view the paintings they will discuss and identify the consumers, producers, and decomposers as well as the energy sources.

**REFLECTION**

**Reflective Strategies**

Students will answer the following Reflection Questions (see Downloads) using complete sentences:

1. How did painting a Monet style painting help you better understand and identify producers, consumers, and decomposers?
2. Why is the energy source for producers, consumers, and decomposers an important part of an ecosystem?

**DIFFERENTIATION**

**Below Grade Level/EL Students:**
- Students would benefit from a short lesson, before this lesson is taught. This group of students could be shown several examples of consumers, producers, and decomposers in various ecosystems. Perhaps focus on pond habitats as that is what this lesson focuses on. These students would also benefit from being able to locate and explain different energy sources in ecosystems. Using old magazines and creating a collage may also be beneficial when identifying energy sources.

**Above Grade Level:**
- These students could take this project one step further by evaluating and analyzing what would change in their garden ecosystem if one of the consumers, producers, or decomposers were no longer in the environment. How would the ecosystem change?
ADDITIONAL RESOURCES

- [http://art.pppst.com/monet.html](http://art.pppst.com/monet.html) (This link/site provides over 10 Powerpoint slideshows from Claude Monet and the Presence of Nature to Impressionism and Claude Monet.)
- *The Magical Garden of Claude Monet* by Laurence Anholt
- *Who Was Claude Monet?* by Ann Waldron
- *Linnea in Monet’s Garden* by Cristina Bjork
- *Monet Paints a Day* by Julie Danneberg

APPENDIX

- Monet Style Ecosystem Painting Rubric
- Written Reflection Sheet

CREDITS

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