

Bringing Ecology To the Classroom through Movement and Gaming

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Standards

Living Environment Standard 4: K6:6.1a

Energy flows through ecosystems in one direction, typically from the Sun, through photosynthetic organisms including green plants and algae, to herbivores to carnivores and decomposers.

In all organisms, the energy stored in organic molecules may be released during cellular respiration. This energy is temporarily stored in ATP molecules. In many organisms, the process of cellular respiration is concluded in mitochondria, in which ATP is produced more efficiently, oxygen is used, and carbon dioxide and water are released as waste.

Key Assessments

Food Chain Bingo
Exit Tickets
Do Now
Station Activity

Curriculum Components

I planned this lesson with all of my target learners and more in mind. I wanted them to have options and fun, as I believe that learning should be a joyful experience and not boring.

Many of my students, especially Daniel and Angel, have a habit of getting up during class, disturbing other students, making loud noises and asking to go to the bathroom or to get water. Angel was falling asleep and started not coming back to class because he was bored with the lesson. He wasn't able to sit still for a whole period and follow a PowerPoint presentation. He needed variety in his lesson and he needed something that would keep him engaged.

Daniel still attended class but often carried on his conversations with little attention to the lesson. Either he was on his cellphone or asking me questions about my life.

First, students arrived at the classroom, sat down, and watched [a music video about the Food Chain](#). They were engaged at every part of the lesson including a video of the food chain. In fact, the song became stuck in their head all day and they couldn't stop singing it.

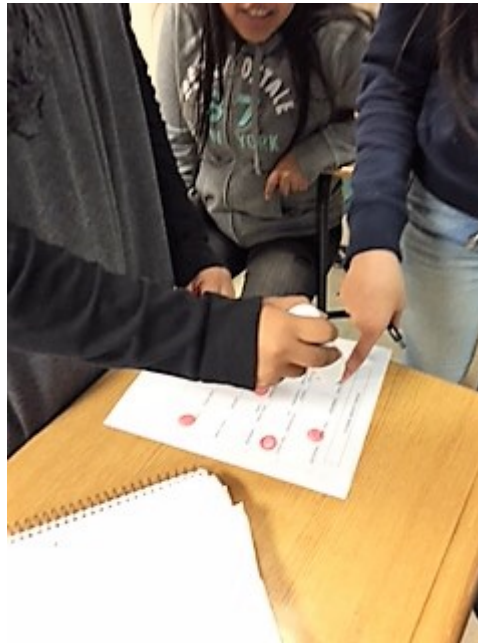
After the students watched the music video, they then answered a Do Now question: They only needed to write one sentence in response to the video and some volunteered to share out with their peers.

	<p>While they are sharing out, I had a student pass out a Vocabulary sheet and a handout of the Powerpoint presentation information. We watched a five minute colorful presentation, full of videos, stopping in between slides to do checks for understanding. I asked the students questions to make sure they can fully answer and have knowledge of the content being taught. I also had some students read some the slides where there are no visuals.</p> <p>After they finish watching the presentation, they played a quick game of "Food Chain BINGO." Students worked groups and each group was given a single bingo card and a marker. When a definition is called out the students had to match the vocabulary word to the definition. Once a group gets BINGO they will be rewarded.</p> <p>I implemented games and a lot of group work because the students enjoy working with their peers and Daniel, Angel and Kevin prefer this way of learning. They enjoy playing games at home with their family and so playing a BINGO game in class was fun and entertaining to them. They received a reward after winning the BINGO game, which helped encouraged their engagement as well.</p> <p>At the end of the game, the students broke into groups where they worked in stations. They worked in groups of fives. They took approximately 15 minutes to go from station-to-station completing the given tasks as a team.</p> <p>Here is a list of each station's task:</p> <ul style="list-style-type: none"> ● Station #1: Fill in the blank on the food chain. Place pictures of the different organisms in their proper places on the food chain. ● Station #2: Use post its on chart paper. Write answers to 5 questions on the post-its and place it in the corresponding spot for their group. ● Station #3: Matching up definitions; students identify whether a vocabulary word is categorized as a producer, consumer or decomposer. See how many you can get right in 3 minutes. This station is timed. ● Station #4: Identify a "mystery" organism; read examples and guess "who" the organism is. See how many you can get right in 3 minutes. This station is timed.
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Universal Design for Learning Strategies	
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<p>Strategy 1: Implementing Games as a part of learning</p>	<p>Students participated in a Food Chain Bingo. Students were put into groups of fours and fives. Each group was given a bingo card and a bingo marker.</p> <p>Different names and vocabulary words that they were going to learn for the unit were placed on each card.</p> <p>They had to use the marker to check off each box when they heard the definition or was given a word.</p>
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The first team to get BINGO was rewarded with a candy bar.



Strategy 2: Stations activity

Stations activity gave students the opportunity to be up and about during the lesson, thus moving around and learning at the same time.

Station # 1

Task: Place organisms in the correct order in the food chain!! 😊

Group 1

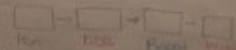


Group 2



Group 3
Write the definition of a food chain! Go!!

Group 4



Group 5: Write an example of a food chain

Station # 1

Task: Place organisms in the correct order in the food chain!! 😊

Group 1



Group 2



Write a food chain