

Subject/Grade: Grade 7/8 Science **Lesson Title:** Producers, Consumers, & Decomposers **Teacher:** Chandra Wassill

Stage 1: Identify Desired Results

Established Goals: (Learning outcome/s & indicator/s from curriculum)

IE7.2 Observe, illustrate, and analyze living organisms within local ecosystems as part of interconnected food webs, populations, and communities.

i. Classify organisms in a variety of ecosystems as producers, consumers, or decomposers and further classify consumers as herbivores, carnivores, or omnivores.

Understandings: (can also be written as 'I Can' statements)
Students will understand...

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How food webs, populations, and communities are interconnected.
 The definition of producer, consumers, and decomposers.
 That consumers can be herbivores, carnivores, or omnivores.

Essential Questions:

What are the roles of producers, consumers, and decomposers?
 How can we classify living organisms?
 How do different types of organisms contribute to food webs?

Students will know...

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Organisms, ecosystems, food webs, populations, communities, producers, consumers, decomposers, herbivores, carnivores, omnivores

Students will be able to...

Classify organisms as producers, consumers, or decomposers.
 Classify consumers as herbivores, carnivores, or omnivores.
 Observe and analyze food webs, populations, and communities within ecosystems.

Stage 2: Determine Evidence for Assessing Learning

Formative assessment: Student responses, verbal and written, exit activity

Stage 3: Build Learning Plan

Instructional Strategies:

Video, response sheets, whole class discussion.

<p>Set (Engagement): What did we learn last time? Length of Time: 2 mins</p> <p>Ask students for three ideas that they learned about in the last science lesson. Quick verbal review.</p> <p>Development: Learning how to classify organisms Time: 45 mins</p> <p>Watch this Bill Nye Food Web video and respond to questions while watching. Review the answers for the sheet</p> <p>Define producers, consumers, and decomposers (organizer)</p> <p><u>Producers</u> - can make their own food and energy. Plants are producers. They make their own energy from photosynthesis.</p> <p><u>Consumers</u> - an organism that has to eat, or consume, other living things for food. All animals are consumers.</p> <p><u>Herbivores</u> - consume plants as food.</p> <p><u>Carnivores</u> - consume other animals as food.</p> <p><u>Omnivores</u> - consume both other animals and plants as foods.</p> <p><u>Decomposers</u> - are a type of consumer that break down dead plants and animals and animal waste. Put nutrients back into the soil</p> <p>Let's classify the following living organism from the Bill Nye video as either producers, consumers, or decomposers: cows, chicken, earthworms, wheat, tuna, people, apple tree, fungi</p> <p>How would we classify these aliens? Jot down key answers on board</p> <p><u>Florp</u>: Florp gains energy from the purple alien sun. Florp uses the sun to create food and grow</p> <p><u>Squid</u>: Squid gets energy from eating Florps. Squid also eats little aliens life forms that are similar to the butterflies on planet earth</p> <p><u>Gart</u>: Gart has to eat 10x their body size. To acquire this energy, Gart consumes Squids</p> <p><u>Phil</u>: Once the other aliens die, Phil breaks them down for energy. Phil has the important job of breaking the alien organisms down into nutrients</p> <p>Closure: Alien Food Web Time: 5 mins</p> <p>Work together as a class to organize the aliens into a food web.</p>	<p>Materials/Resources:</p> <p>Bill Nye Food Web video Lesson worksheet Bill Nye Video Answers Slide presentation</p> <p>Possible Adaptations/ Differentiation:</p> <p>Instead of whole class discussion, could work in small groups Have students respond using online tools instead of verbal responses Create subtitles for the video Provide access to a script of the video to allow students to have the information from the video in front of them if needed.</p> <p>Management Strategies:</p> <p>Moving around the classroom Worksheets to promote attention during video</p> <p>Safety Considerations:</p>
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Stage 4: Reflection

- Bill Nye went great, I think the worksheet went well and helped focus
- Aliens went way better than I thought it would; the students loved them and really understood the ideas
- Lesson went well, they were engaged,
- Some students tried to get me off track, but I kept sneaking the curriculum back into my answers
- Lots of movement during the lesson
- Great participation from students
- The students got excited and noisy! Lots of great thinking and fun!