# Grade Level: 4<sup>th</sup> Subject Focus: Science: Energy flow within an ecosystem Date: June 8, 2020

Georgia Standard of Excellence (GSE)	<ul> <li>S4L1. Obtain, evaluate, and communicate information about the roles of organisms and the flow of energy within an ecosystem</li> <li>a. Develop a model to describe the roles of producers, consumers, and decomposers in a community.</li> <li>b. Develop simple models to illustrate the flow of energy through a food web/food chain beginning with sunlight and including producers, consumers, and decomposers.</li> <li>c. Design a scenario to demonstrate the effect of a change on an ecosystem.</li> </ul>
Learning Target(s) Targets must be aligned to the GSE and with the assessment(s); targets should be stated as measurable (e.g. 'I can' statements for students).	<ul> <li>I can describe the roles of producers, consumers, and decomposers in a community using a model.</li> <li>I can illustrate the flow of energy through a food web/ chain beginning with sunlight and including producers, consumers, and decomposers using a simple model.</li> <li>I can design a scenario to demonstrate the effects of a change on an ecosystem.</li> </ul>
Materials What resources will be needed to engage students? Be as precise as possible	<ul> <li>"Feed Me: Classifying Organisms- Crash Course Kids #1.2" video</li> <li>"What is a Food Chain? The Dr. Binocs Show Educational Videos for Kids" video</li> <li>"Understanding Ecosystems for Kids: Producers, Consumers, Decomposers- FreeSchool" video</li> <li>"Photosynthesis for Kids- Learn How Plants MAKE Their Own Food" video</li> <li>"The Dirt on Decomposers: Crash Course Kids #7.2" video</li> <li>"Ecosystems Song- Science Music Video"</li> <li>Create Your Own Food Chain worksheet</li> <li>Ecosystems Crossword</li> <li>Change in Ecosystems Flow Chart</li> <li>Scissors</li> <li>Glue</li> <li>Markers/ Colored Pencils</li> <li>Something to write with</li> </ul>
Oxbow @ Home Project Describe your project. Include the steps and directions that students and/or parents would need to follow	For this project, I wanted to make sure children understand ecosystems and the roles of all the organisms in an ecosystem, from the sun to the fungi. To begin, students should watch both the "Classifying Organisms Crash Course" and "What is a Food Chain?" videos. Then, they should be able to complete the Create Your Own Food Chain worksheet, in which they describe the roles of producers, consumers, and decomposers in a community using a model as well as illustrate the flow of energy through a food web/chain beginning with sunlight and including producers, consumers, and decomposers using a simple model. After this, children

should watch the video titled "Photosynthesis for Kids" and "The Dirt on
Decomposers Crash Course" video. They should then work on the All
About Ecosystems crossword puzzle. This puzzle will enhance both the
learning targets mentioned above. Lastly, the students should view the
"Ecosystems Song" as well as "Understanding Ecosystems for Kids"
videos. Once this is done, they will know all about ecosystems and will be
able to finish the Change in an Ecosystem Flow Chart. Accomplishing
these worksheets and puzzles as well as watching the videos associated
with them will leave your child a pro with ecosystems! Please remember
to view the videos as needed.

\*\* Also attach a word document/movie/some sort of tangible product. Worksheets, puzzle pieces, game boards, etc... need to also be included as a word document or a printable pdf. The total amount of material uploaded to CougarVIEW and emailed to Ms. Johnson should be 5-10 pages. Please use as few attachments as possible.

# **Create Your Own Food Chain**

Directions: Using the word box, create your own food chain starting with the sun, and ending with a decomposer. In each circle, draw and color a picture of the plant or animal that belongs there. In the first blank under the picture, label the plant or animal. In the second blank, name its role in the food chain.



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## All About Ecosystems



#### Down:

- 2. an animal that only eats plants
- 3. a group of organisms in their environment
- 5. the energy that plants get from the sun
- 6. a living thing that breaks down other living things

#### Across:

- a model that shows how different organisms eat each other for survival
- 4. an animal that only eats meat
- 5. a plant that gets its energy from the sun
- 7. an animal that eats plants and animals
- 8. an animal that gets its energ from other animals or plants
- 9. the power needed to do work such as staying alive

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### **Changes in Ecosystems Flow Chart**

Directions: Oh no! All the wolves in the forest have suddenly disappeared! Since no one is there to eat the rabbits anymore, they are eating all the plants in the forest. Cut out the missing pieces from the bottom of the page and glue them in their correct spot in the flow chart. This is an example of how an ecosystem can be imbalanced if something doesn't go right.



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