

# Marietta City Schools 2023-2024 District Unit Planner

4th Grade

Topic Title: Unit # 6: Interdependence Among Organisms Unit Duration 3 weeks

Mastering content and skills through KNOWLEDGE-BUILDING (establishing the purpose of the unit):

What enduring understandings will students gain from this unit? An ecosystem is made up of the living and nonliving things, or organisms, within an area. All living things need energy to live. Within an ecosystem, there are producers, consumers, and decomposers. All organisms in an ecosystem depend on each other for survival. Organisms have to adapt to respond to changes in ecosystems.

#### **GSE Standards**

#### <u>ELA</u>

ELAGSE4RI3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

ELAGSE4RI4 Determine the meaning of general academic language and domain specific words or phrases in a text relevant to a grade 4 topic or subject area.

ELAGSE4RI8 Explain how an author uses reasons and evidence to support particular points in a text.

ELAGSE4RI9 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.

#### Science

### S4L1. Obtain, evaluate, and communicate information about the roles of organisms and the flow of energy within an ecosystem.

- a. Develop a model to describe the roles of producers, consumers, and decomposers in a community. (Clarification statement: Students are not expected to identify the different types of consumers herbivores, carnivores, omnivores and scavengers.)
- 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.
- c. Design a scenario to demonstrate the effect of a change on an ecosystem. (Clarification statement: Include living and nonliving factors in the scenario.)
- d. Use printed and digital data to develop a model illustrating and describing changes to the flow of energy in an ecosystem when plants or animals become scarce, extinct or overabundant.

Last Revised: November, 2023

#### **Essential Questions**

- Factual:
  - What are the needs common among all living organisms?
  - What is the relationship between producers and consumers?
- Inferential:
  - o What is the difference between extinct and endangered?
  - What is the difference between a habitat and an ecosystem?
  - How are different organisms within an ecosystem interdependent upon one another?
- Critical Thinking:
  - What would happen to the ecosystem if (a specific plant or animal) was removed from (its habitat)?

Tier II Words- High Frequency Multiple Meaning	Tier III Words- Subject/ Content Related Words
population, organism, community, producer, consumer, energy, survival, scarce, natural, human, invasive	ecosystem, decomposer, food chain, food web, predator, prey, extinct, overabundant

Assessments- 3rd-5th Social Studies and Science assessments are available through AMP. Please see your instructional coach for support if needed.

#### **Transfer of Integrated Skills:**

- Formative assessment
- Summative Assessment "What is an Ecosystem?"

## **Content-Specific GSE/Skills:**

Below is an assessment bank of questions. You can choose questions based on standard/element and DOK level. Please use this assessment bank to create a post test, daily warm up, etc. The file is editable and can be used as needed for your students.

Question Bank You will find an AMP science assessment in Schoology in the 4<sup>th</sup> Grade Assessment Team folder.



Role of Organisms Assessment

Added by You - Apr 30, 2020

Last Revised: November, 2023

## **Writing Task and Rubric:**

Description: What If?

- 1. Have students use the Food Web they completed and described as a Formative Assessment as well as any resources provided or generated during this unit to respond to the following prompt: What might happen if one of the members of your food web became extinct? Would the other members be able to survive? If so, how? If not, why not?
- 2. Provide students with an Information Writing Checklist to guide their work and score final products using an Information Writing Rubric.

Objective or Content	Learning Experiences			Differentiation Considerations		
Daily Lessons for Text Comprehension	15-Day Plan Slides: Interdependence of Organisms Within an Ecosystem					
Connected Sci Experiences	Priority Hands-on Learning Experiences					
Connected Tier 1 Unit	CKLA Introduction to Ecology					
Connected Writing Activities	Embedded into daily slides and assessments:  Day 1 - creating sentences  Day 2 - creating sentences  Day 8 - because, but, so  Day 12 - subordinating conjunctions  Day 14 - because, but, so					
Additional Planning Resources						
MCS K-5 KBU Overview  KBU as a 15-day Plan (Template)		MCS Structured Literacy Repository	Berger Framework for Comprehension (Template)	The Writing Revolution (Templates)		

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