

Backyard Birding

- S.IP.06.11** Generate scientific questions based on observations, investigations, and research.
- S.IP.06.12** Design and conduct scientific investigations.
- S.IA.06.13** Communicate and defend findings of observations and investigations using evidence.
- L.EC.06.11** Identify and describe examples of populations, communities, and ecosystems including the Great Lakes region.
- L.EC.06.21** Describe common patterns of relationships between and among populations (competition, parasitism, symbiosis, predator/prey).
- L.EC.06.22** Explain how two populations of organisms can be mutually beneficial and how that can lead to interdependency.
- L.EC.06.23** Predict how changes in one population might affect other populations based upon their relationships in the food web.
- L.EC.06.32** Identify the factors in an ecosystem that influence changes in population size.
- L.EC.06.41** Describe how human beings are part of the ecosystem of the Earth and that human activity can purposefully, or accidentally, alter the balance in ecosystems.
- L.EC.06.42** Predict possible consequences of overpopulation of organisms, including humans, (for example: species extinction, resource depletion, climate change, pollution).

Great Lakes Adventure

- S.IP.E.1** Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.
- S.IA.E.1** Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.
- S.RS.E.1** Reflecting on knowledge is the application of scientific knowledge to new and different situations. Reflecting on knowledge requires careful analysis of evidence that guides decision making and the application of science throughout history and within society.
- L.OL.M.5** Producers, Consumers, and Decomposers—Producers are mainly green plants that obtain energy from the sun by the process of photosynthesis. All animals, including humans, are consumers that meet their energy needs by eating other organisms or their products. Consumers break down the structures of the organisms they eat to make the materials they need to grow and function. Decomposers, including bacteria and fungi, use dead organisms or their products to meet their energy needs.
- L.EC.M.1** Interactions of Organisms—Organisms of one species form a population. Populations of different organisms interact and form communities. Living communities and nonliving factors that interact with them form ecosystems.
- L.EC.M.2** Relationships of Organisms—Two types of organisms may interact with one another in several ways: they may be in a producer/consumer, predator/prey, or parasite/host relationship. Some organisms may scavenge or decompose another. Relationships may be competitive or mutually beneficial. Some species have become so adapted to each other that neither could survive without the other.
- L.EC.M.3** Biotic and Abiotic Factors—The number of organisms and populations an ecosystem can support depends on the biotic (living) resources available and abiotic (nonliving) factors, such as quality of light and water, range of temperatures, and soil composition.
- L.EC.M.4** Environmental Impact of Organisms—All organisms (including humans) cause change in the environment where they live. Some of the changes are harmful to the organism or other organisms, whereas others are helpful.

- R.6.9** Draw evidence from literary or informational texts to support analysis, reflection, and research.
- SL.6.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.
- SL.6.2** Interpret information presented in diverse media and formats and explain how it contributes to a topic, text, or issue under study.
- SL.6.3** Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.
- VAU.6.6** Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.
- RST6.8** Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.
- MP.2** Reason abstractly and quantitatively.
- MP.3** Construct viable arguments and critique the reasoning of others.
- MP.7** Look for and make use of structure.
- MP.8** Look for and express regularity in repeated reasoning.

Great Lakes Food Web

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- L.EC.M.2** Relationships of Organisms—Two types of organisms may interact with one another in several ways: They may be in a producer/consumer, predator/prey, or parasite/host relationship. Some organisms may scavenge or decompose another. Relationships may be competitive or mutually beneficial. Some species have become so adapted to each other that neither could survive without the other.
- L.EC.M.4** Environmental Impact of Organisms—All organisms (including humans) cause change in the environment where they live. Some of the changes are harmful to the organism or other organisms, whereas others are helpful.
- SL.6.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.

Invasive Species Musical Chairs

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Sea Lamprey Suck! Vampire Tag

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Let's Rock

S.IP.06.11 Generate scientific questions based on observations, investigations, and research.

S.IP.06.12 Design and conduct scientific investigations.

S.IP.06.13 Use tools and equipment (spring scales, stop watches, meter sticks and tapes, models, hand lens, thermometer, models, sieves, microscopes) appropriate to scientific investigations.

E.SE.M.4 Rock Formation- Rocks and rock formations bear evidence of the minerals, materials, temperature/pressure conditions, and forces that created them.

E.SE.06.41 Compare and contrast the formation of rock types (igneous, metamorphic, and sedimentary) and demonstrate the similarities and differences using the rock cycle model.

E.ST.06.31 Explain how rocks and fossils are used to understand the age and geological history of the Earth (timelines and relative dating, rock layers).

E.ST.06.41 Explain how Earth processes (erosion, mountain building, and glacier movement) are used for the measurement of geologic time through observing rock layers.

E.ST.06.42 Describe how fossils provide important evidence of how life and environmental conditions have changed.

Uncovering Michigan's Prehistoric Past

L.EC.06.41 Describe how human beings are part of the ecosystem of the Earth and that human activity can purposefully, or accidentally, alter the balance in ecosystems.

E.SE.06.12 Explain how waves, wind, water, and glacier movement, shape and reshape the land surface of the Earth by eroding rock in some areas and depositing sediments in other areas.

E.ST.06.31 Explain how rocks and fossils are used to understand the age and geological history of the Earth (timelines and relative dating, rock layers).

E.ST.06.42 Describe how fossils provide important evidence of how life and environmental conditions have changed.

6 – W1.2.1 Describe the transition from hunter gatherers to sedentary agriculture (domestication of plants and animals).

6 – W1.2.2 Describe the importance of the natural environment in the development of agricultural settlements in different locations (e.g., available water for irrigation, adequate precipitation, and suitable growing season).

6 – H1.1.1 Explain why and how historians use eras and periods as constructs to organize and explain human activities over time.

6 – H1.2.1 Explain how historians use a variety of sources to explore the past (e.g., artifacts, primary and secondary sources including narratives, technology, historical maps, visual/mathematical quantitative data, radiocarbon dating, DNA analysis).

6 – W1.1.1 Describe the early migrations of people among Earth's continents (including the Beringia and Bridge).

6 – W1.1.2 Examine the lives of hunting and gathering people during the earliest eras of human society (tools and weapons, language, fire).