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| M. Angileri ♣ 5 -28-18 | **6th grade science** | | **Lesson Plans: Predation in Ecosystems #2S** | | | | |
| NGSS Standard | **MS-LS2-2**  DCI (A)  MS-LS2.A.4.  S & E practices  CCC | | Construct an explanation that predicts pattern of interactions among organisms across multiple ecosystems.  **Interdependent Relationships in Ecosystems**: Similarly, predatory interactions may reduce the number of organisms or eliminate whole populations of organisms. Mutually beneficial organism, in contrast, may become so interdependent that each organism requires the other for survival. Although the species involved in these competitive, predatory, and mutually beneficial interactions vary across ecosystems, the patterns of interactions of interactions of organisms with their environments both living and nonliving, are shared  **Constructing Explanations and designing solutions:** Construct an explanation that includes qualitative or quantitative relationships between variables that predicts and / or describes phenomena  **Cause and Effect:** Cause and effect relationships may be used to predict phenomena in natural or designed systems. | | | | |
| Vocabulary: | | **Abiotic Factors:** A nonliving part of an ecosystem.  **Biotic factors**: A living part of an ecosystem  **Dynamic:** Characterized by constant change, activity, or progress.  **Ecosystem:** A system comprising all the biotic and abiotic factors in an area and all the interactions among them.  **Resilience:** The ability of an organism, population, community, or ecosystem to persist in the face of stressful or changing conditions.  **Succession:** The process of the migration of a new species into an ecosystem after a disruptive event.  **Aquatic:** Relating to the water; living in or near water or taking place in water.  **Consumer:** An organism that must consume other organisms for nutrients.  **Cycle of Matter:** The continuous movement of different types of matter, such as water, phosphorus, nitrogen, and carbon, through different parts of the hydrosphere, atmosphere, and biosphere.  **Decomposers**: Organisms such as bacteria and fungi that break down the remains of dead plants and animals, without need for internal digestion.  **Ecological Recycling:** The movement and exchange of living and nonliving matter back into the production of living matter.  **Energy Transfer:** Transfer of energy from the Sun through the different tropic levels of the biosphere.  **Food Webs:** Overlapping food chains with different pathways for the flow of food energy in an ecosystem.  **Nutrients**: A substance that provides materials necessary for the growth and maintenance of life.  **Producer:** An organism that makes complex energy containing biomolecules from simple inorganic molecules using energy captures from light or inorganic chemical compounds.  **Terrestrial:** On or of the Earth.  **Tropic Levels:** Any Class of organisms occupying the same position in a food chain, such as primary consumer or secondary consumers. | | | | | |
|  | | **MONDAY** | | **TUESDAY** | **WEDNESDAY** | **THURSDAY** | **FRIDAY** |
| Content Objective: | | SW demonstrate application of patterns of interactions among organisms by carrying out the Symbiotic buddies activity. | | SW demonstrate analysis of patterns of interactions among organisms by distinguishing answer choices in the activities. | SW demonstrate evaluation of patterns of interactions among organisms by testing. | SW demonstrate evaluation of patterns of interactions among organisms by Critiquing The Lion king. | SW demonstrate evaluation of patterns of interactions among organisms by Critiquing The Lion king. |
| Language objective | | SW orally describe patterns of interactions among organisms using the Symbiotic buddies activity. | | SW write to answer questions about patterns of interactions among organisms using sentence frames. | SW write to answer questions using content specific vocabulary. | SW write to critique patterns of interactions among organisms using complete sentences. | SW write to critique patterns of interactions among organisms using complete sentences. |
| **Essential Question:** | | **Why would a stable ecosystem never have more carnivores than herbivores?** | | **Why would a stable ecosystem never have more carnivores than herbivores?** | **Why would a stable ecosystem never have more carnivores than herbivores?** | **Why would a stable ecosystem never have more carnivores than herbivores?** | **Why would a stable ecosystem never have more carnivores than herbivores?** |
|  | | Do 1: Matching Symbiotic Buddies  Study Guide | | Correct Study Guide  Brain Pop: Ecosystems (video, Challenge, quiz) and Food Webs (video, Challenge, quiz) | Test  The Lion King  How they got it wrong  How they got it right? | The Lion King  How they got it wrong  How they got it right? | Locker clean out. (1st)  The Lion King  How they got it wrong  How they got it right? |

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