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| M. Angileri ♣ 5 -28-18 | **6th grade science** | | **Lesson Plans: Predation in Ecosystems #1** | | | | |
| 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 capacity by carrying out the Panther Hunt activity and follow up. | SW demonstrate comprehension of patterns of interactions among organisms by summarizing information in a guided reading. | SW demonstrate application of patterns of interactions among organisms by carrying out the Symbiotic buddies activity. |  |
| Language objective | |  | | SW write to draw conclusions about patterns of interactions among organisms using the Panther Hunt Activity. | SW write to summarize patterns of interactions among organisms using the guided reading. | SW orally describe patterns of interactions among organisms using the Symbiotic buddies activity. |  |
| **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?** |  |
|  | | Memorial Day | | CCV: Predator Prey  Panther hunt Activity | CCV: Migration Predation  Read and discuss Interactions among Living Things p.31- 38  Guided Reading | Do 1: Matching Symbiotic Buddies , | Locker clean out.  The Stock Market Game |

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