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| M. Angileri ♣ | **6th grade science** | | **18-19 4-15-19 Flow of Energy in Ecosystems #2** | | | | | |
| NGSS Standard | **MS-LS2-3**  **DCI**  S & E practices  CCC | | Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem  **Cycle of Matter and Energy Transfer in Ecosystems:** Food webs are models that demonstrate how matter is transferred between producers, consumers, and decomposers as the three groups interact within an ecosystem.  **Developing and Using Models:** Develop a model to describe phenomena  **Energy and Matter:** The transfer of energy can be tracked as energy can be tracked as energy flows through a natural system. | | | | | |
|  | | **MONDAY** | | **TUESDAY** | **WEDNESDAY** | **THURSDAY** | **FRIDAY No school** |
| Content Objective: | | SW demonstrate application of how matter is transferred between producers, consumers, and decomposers as the three groups interact within an ecosystem by carrying out the food Web activity with 70% accuracy | | SW demonstrate knowledge of the cycling of matter and flow of energy among living and nonliving parts of an ecosystem by identifying components of food chains and food webs with 70% accuracy. | SW demonstrate application of the cycling of matter and flow of energy among living and nonliving parts of an ecosystem by carrying out the nitrogen cycle game with 70% accuracy. | Students will demonstrate comprehension of the cycling of matter and flow of energy among living and nonliving parts of an ecosystem explaining how information from the article is connected to the objective with 70% accuracy. |  |
| Language objective | | SW Speak/Listen/Write to explain how matter is transferred between producers, consumers, and decomposers as the three groups interact within an ecosystem using pictures, diagrams and sentences. | | SW listen/speak/write to defend the cycling of matter and flow of energy among living and nonliving parts of an ecosystem using sentence starters. | SW write/speak to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem using the game record sheet with 70% accuracy. | SW listen/speak to give examples of the cycling of matter and flow of energy among living and nonliving parts of an ecosystem using complete sentences. | . |
| Classwork: | | Type 2 describe the photosynthesis process  Complete Explore 1 Activity: Food Webs  Concept review Game Due Thursday | | Explore 2: Cycling of Matter and Energy Part1  Science Rock Food Chain Song | Explore 2: Cycling of Matter and Energy Part 2 and 3 | Concept Review Game Due  Reading Science A: Lets farm some Shrimp.  Scope Quiz |  |

Vocabulary:

Aquatic: Relating to water; living in or near water or taking place in water.

Atom: The smallest particle of an element; made of electrons, protons, and neutrons.

Consumers: An organism that must consume other organisms for nutrients.

Decomposers: Organisms such as bacteria and fungi that break down the remains of dead plants and animals without the need for internal digestion.

Decomposition: The process by which dead organic matter is broken down into simpler chemicals and dispersed.

Ecosystem: A system comprising all biotic and abiotic factors in an area and all the interactions among them.

Energy: The ability if a system to do work; required for changes within a system.

Energy Transfer: Transfer of energy from the Sun through the different trophic Levels of the biosphere.

Food Chain: A food chain simply states which organisms consume each other and shows how energy flows through living things in an ecosystem.

Food Web: Overlapping food chains with different pathways for the flow of food energy in an ecosystem.

Matter Cycle: The movement of elements or molecules through a repeated sequence of events.

Nutrients: Substances that provide nourishment essential for growth and the maintenance of life.

Organism: A self contained living thing.

Photosynthesis: The process that plants use to convert energy from the Sun into chemical energy.

Producers: Organisms that transform energy from the Sun and use carbon dioxide and water to make food.

Respiration: The chemical reaction that takes place in all living cells to release energy from glucose.

Terrestrial: On or of Earth.

Trophic Level: The position an organism occupies on the food web.