**Biogeochemical Cycles (**cycles of chemicals between the earth and living things)

**Water Cycle Notes and Poster:**

Notes:   
Go to this Water Cycle Interactive: <http://www.montereyinstitute.org/noaa/lesson07/l7ex.swf> and take notes about the Structures and Processes of the water cycle. Be sure to define all of the vocabulary.

Poster:   
Make a poster that shows the Water Cycle in Marin County. Include and label all of the items in the table below.

|  |  |  |
| --- | --- | --- |
| **Structures / Places** | **Process** | **Include in the Poster** |
| Atmosphere  Pond or Lake  Stream  Ocean  Bay  Groundwater | Precipitation  Condensation  Evaporation  Transpiration  Runoff | Mount Tamalpais  Pacific Ocean  San Francisco Bay  Golden Gate Bridge  Fog  Trees |

Describe:

Write a paragraph describing how a water molecule cycles through biotic and abiotic parts of the Mt Tam ecosystem. Include all of the Process vocabulary from the table above in your paragraph.

Bonus: Describe 2 ways that humans affect this cycle. How is the environment impacted by our behavior?

**Carbon Cycle Notes and Poster:**

Notes:   
Play this Carbon Cycle Game and trace a molecule of Carbon on its Journey through the ecosystem: <http://www.windows2universe.org/earth/climate/carbon_cycle.html> . Take notes about the Structures and Processes of the carbon. Be sure to define all of the vocabulary.

Poster:   
Make a poster that shows the Carbon Cycle in Marin County. Include and label all of the items in the table below.

|  |  |  |
| --- | --- | --- |
| **Structures / Places** | **Process** | **Include in the Poster** |
| Carbon Sinks: Atmosphere  Ocean / Bay  Fossil Fuels in the Ground  Dead matter in the soil | Photosynthesis  Respiration / Breathing out  Decomposition  Burning fossil fuels | Mount Tamalpais  Pacific Ocean  Highway 101 + Cars  Trees  Animals  Sun  Soil |

Describe:

Write a paragraph describing how a Carbon atom cycles through biotic and abiotic parts of the Mt Tam ecosystem, starting in the atmosphere / sky, to the ground, and returning to the atmosphere.. Include all of the Process vocabulary from the table above in your paragraph.

Bonus: Describe 2 ways that humans affect this cycle. How is the environment impacted by our behavior?