## **OMMUNITIES & BIOME**

It has been said that nothing comes from thin air, yet in reality, all living things come from air! We are all made of organic compounds that originally started with the carbon dioxide in the air. While nutrients such as carbon come from the air, the energy that fuels all living things come from the sun. In this unit, you will explore how energy and nutrients move through a biological community.



Three Content Elements

One Food Web  $\Box$ 

One Science Literacy  $\Box$ 

Two Nutrient Cycling  $\Box$ 

One Review  $\Box$ 

Bottle Biology 🗌

#### Content Elements – Choose Three 10 pts. Each

Lecture Series - Participate in face-to-face discussions

Puzzles - Practice key vocabulary terms using Sudoku Puzzles

Children's Literature - Create children's stories using specific prompts about food webs and nutrient cycles

Guided Reading – Read and complete questions about communities and biomes

Textbook Lessons - Read specific pages within the textbook and complete questions

Destination Mars - Create a sustainable space station that will provide people with the food, oxygen and energy they need to survive long term in space

#### Food Webs - Choose one 10 pts.

Walleye – Play a board game to discover how energy transfers through a community

Online Food Webs - Complete the online study of several communities including an African Grassland and Australian Wilderness

Food Web Poster - Create a poster that accurately depicts the energy pyramid

Science Literacy – Choose one 10 pts.

Succession OR Bioaccumulation

Nutrient Cycling - Do BOTH 5 pts. Each

Incredible Journey – Follow a water molecule through the water cycle and create a story about its many adventures

<u>Carbon Cycle</u> - Simulate the movement of carbon through a community before and after industrialization

Review Guide

### Bottle Biology

A student designed experiment where you discover the process of water and/or nutrient cycling

# September 2015

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3 Finish The Lorax Begin Nutrient Cycles Discussion	4 Nutrient Cycles Water Cycle Incredible Journey	5
6	7 NO SCHOOL!	8 Journey Discussion Water Cycle Notes Carbon Cycle Before	9 Carbon Cycle Before & After Carbon Cycle & Nitrogen Cycle Notes Lecture 2 Sudoku Puzzles	10 Checkpoint Quiz Sudoku Puzzles Student Choice Content Element	11 Food Webs	12
13	14 Salamander Quandary Succession& Bioaccumulation	15 Succession Bioaccumulation Review	16 Unit Assessment	17 Destination Mars Bottle Biology	18	19
20	21 Bottle Biology	22 New Unit	23	24	25	26
27	28	29	30			