STANDARD I: Students will understand that living organisms interact with one another and their environment.
I can understand and use the following terms as it relates to ecology.

Producers	**Carnivores**	**Tropic levels**	**Ecosystem**
Autotrophs	**Omnivores**	**Species**	**Biome**
Consumers	**Detritivores**	**Populations**	**Biosphere**
Heterotrophs	**Decomposers**	**Community**	
Herbivores			

I will show that I know these terms by:
Passing the vocabulary quiz with 90% or better.

I can summarize how energy flows through an ecosystem by:

1) Arrange components of a food chain according to energy flow.
- a) Activities that will help me accomplish this
  - i) Read pages 69- 71 in the textbook.
  - ii) Do the food web activity on line with computers www.gould.edu.au/foodwebs/kids_web.htm
  - iii) Take this food web quiz www.theteacherspot.com/classroom/foodchains.htm on line.
- **b) I will show that I know this by being able to**
  - i) Draw a food web on the I-Mac computers with all levels of represented ((1) decomposers, (5) Consumers representing at least 3 tropic level and (2) producers) of at least two different ecosystems.

2) Compare the quantity of energy in the steps of an energy pyramid.
- **a) Activities that will help me accomplish this**
  - i) Read pages 72-73 in the textbook.
  - ii) Of Dibbles, Dinks, Woks, and Dorgs activity
  - iii) Nibbles and Bits (3) activity
- **b) I will show that I know this by being able to**
  - i) Construct the pyramids asked of me in the activities above.

3) **Describe strategies used by organisms to balance the energy expended to obtain food to the energy gained from the food**.
- **a) Activities that will help me accomplish this**
  - i) Reading on
  - ii) Animal Migration http://encarta.msn.com/text_761557464___0/Animal_Migration.html
  - iii) Hibernation http://encarta.msn.com/text_761552980___0/Hibernation.html
  - iv) Dormancy. http://encarta.msn.com/text_761572258___0/Bear.html
- **b) I will show that I know this by writing a paper covering the following**
  - i) The strategies Balance of energy expend to obtain food to energy gain from the food
  - ii) Reason why organism migrate.
  - iii) Others ways organism cope with environmental changes.
  - iv) The Paper should be in the following format
    - (1) Typed double spaced (blue or black inch single spaced if not typed)
    - (2) Well written paragraphs
    - (3) Complete Sentences
    - (4) Proper spelling
    - (5) One page in length.

4) **Compare the relative energy output expended by an organism in obtaining food to the energy gained from the food**
- **a) Activities that will help me accomplish this**
  - i) Bear Activity
- b) **I will show that I know this by being able to**
  - i) Complete the question asked of me in the activity.

5) Research food production in various parts of the world.
- **a) Activities that will help me accomplish this:**
  - i) Research food production of one food type (i.e. oats, wheat, corn, barley, sugar, milk, apples, other fruit, or vegetables, any grains, etc.)
- **b) I will show that I know and understand this by:**
  - (1) Write a report that is typed double spaced that includes the following
    - (a) Description of the food type
    - (b) Its life cycle
    - (c) Its water and other nutritional needs
    - (d) Factors that effect crop yield
    - (e) Which populations of the world use this food the most
    - (f) Common products that are produced by it.