Carrying Capacity Investigation

Name:_____

Algebra Lab + Carrying Capacity

Part 1 – Understanding the Terminology:
Directions: Refer to the graph and paragraph explanation on the website provided (http://www.algebralab.org/practice/practice.aspx?file=Reading_CarryingCapacity.xml) to develop descriptions of the key terms listed below.

TERM	DESCRIPTION
Graph	
Capacity	
Population	
Environment	
Species	

Part 2 – Applying your Understanding:
Directions: Answer each of the "General Questions" on the website. Check your answers and THEN commit an explanation onto this page!

1. If the second half of the graph (the fluctuating part) can be classified as logistic growth, what can the first half of the graph be called?

Exponential growth

2. What does the purple line represent? What does the blue line represent? What does it mean when the purple line rises above the blue line?

Purple = species population; blue = carrying capacity; when the purple line rises above the blue, the population has overshot the carrying capacity.

3. Which of the following situations might cause the purple line to decrease below the blue line: abundant food sources, lack of competition, a young population, or plentiful roaming space?

Lack of competition.

4. Can you think of any events that would cause the purple line to stay above the blue line indefinitely?

This is not possible. Once a population exceeds the carrying capacity, it must eventually decrease below it in order to recover and prosper again.

An Ecology Fable

By: _____

Title: _____

- Biotic and abiotic factors/features
- niche
- food chains and food webs
- predator-prey relationships
- energy transfer - 10%
- biological accumulation - 100%
- limiting factors
- carrying capacity