

Interactions in Ecology

Read the Prologue under the document camera and respond to the following:

- 1) What resources would a male mouse and a female mouse in a cage need to stay alive?
- 2) If a male mouse and a female mouse were placed in a cage with appropriate resources, what would happen?
- 3) If you left the mice in the cage for a very long time but gave them only the same amount of resources that they started with, what do you think would happen? Explain your response.

“Unsupervised” Activity

Read the introduction and answer the following questions:

- 1) What would be the ideal conditions for a population to grow rapidly?
- 2) Sketch a version of the graph shown under the document camera and label the stages of growth.



- 3) Define carrying capacity and indicate what might cause the carrying capacity of a population to change.

The Lynx and the Hare – pg. 528-529

Read the activity introduction and follow the procedures on pg. 529

Use the data table below to record the number of hares and lynx in the ecosystem after each round.

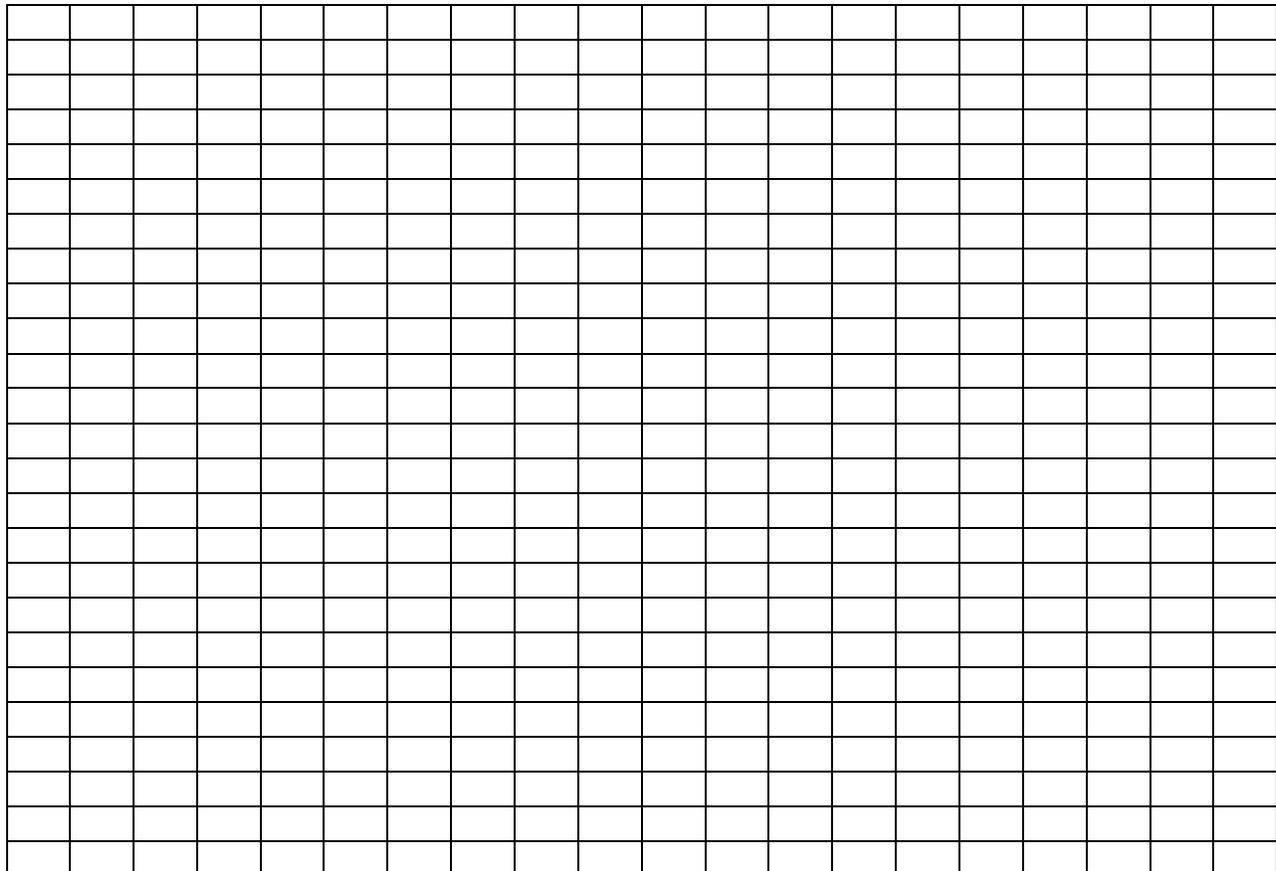


Round #	Hares	Lynx
1		
2		
3		
4		
5		
6		
7		
8		

Round #	Hares	Lynx
9		
10		
11		
12		
13		
14		
15		

Create a graph that shows the change in the lynx and hare populations over time (round #'s). Include a title and label the axes. (Note: You should have 2 line graphs ... one for hares, one for lynx)

Title:



Biology-Ecology Unit

Analysis:

- 1) Describe your graph in words.

- 2) How is the population of hares dependent on the population of lynx?

- 3) How is the population of lynx dependent on the population of hares?

- 4) What would happen if all hares were removed from the ecosystem? Explain.

- 5) What would happen if all the lynx were removed from the ecosystem? Explain.

- 6) What other factors could affect the size of the hare and lynx populations?

Growth Curve Notes

Title: _____

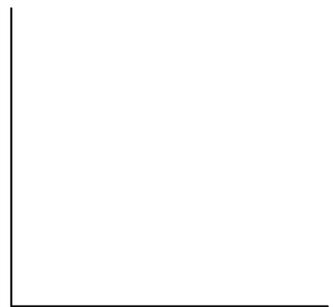
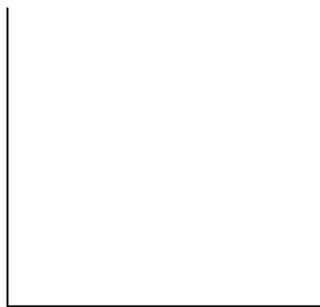
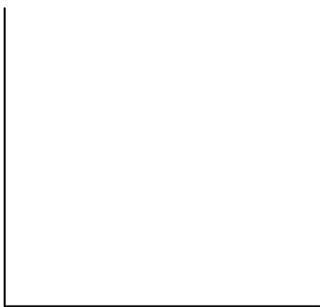
Title: _____

Title: _____

Example:

Example:

Example:



Explanation:

Explanation:

Explanation: