

WHAT GOES UP MUST COME DOWN LAB THE LYNX EATS THE HARE

NAME _____

Period _____

The square on your lab table represents the area inhabited by a population of snowshoe hares. This square is two feet on each side. Within this area you will need to use your imagination as to what type of environment the snowshoe hares live in. But, we can imagine a mountain area with trees and small shrubs.

PROCEDURE

1. Begin the simulation by populating the habitat with **THREE** hares. They can be placed spatially within the square.
2. Toss the cardboard lynx into the square in an effort to capture (i.e., land on any portion of) as many hares as possible. In order to survive and reproduce, the lynx must capture at least three hares when tossed. With the hare population at this stage, lynx survival is virtually impossible. Remove any hares captured and enter the tallies for the first generation.
3. The hare population doubles between generations-multiply "hares remaining" by two and enter the resulting number in the "number of hares" column for the second generation. Place the required number of hares in the square. If no lynx survived the previous generation another mover into the area. Toss the newly recruited lynx-repeating step 2. Remove any captured hares and enter the new tallies.
4. By generation 5 the lynx should be able to capture three hares when tossed. If successful, the lynx survives until the next generation and also produces offspring. (One per each three hares captured.) Toss the lynx square for each lynx.
5. As the population builds it is important to separately tally each lynx's kills, removing captured hares after each lynx is tossed. Determine lynx survival and reproduction using individual capture numbers. Remember, lynx produce one offspring for each three hares captured. If a lynx captures seven hares, three lynx enter the next generation- the original lynx and two offspring. Individual lynx capture numbers should be tallied and totals entered in the table.
6. Between generations 9-11, the populations will probably crash back to, or near zero. If and when this happens be sure to begin later generations with at least three hares.

Data table is on the back of this sheet

Data table

Generations	Number of Lynx	Number	Hares eaten	Hares remaining	Lynx starved	Lynx surviving	Lynx offspring
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							

Data table

