		,	
	Name	,	
INTERPRETING ECOLOGICA			3/
Graph 1: Rabbits Over Time		and the same of th	
orapii ii itaabita over tiille			
a. The graph shows a	60		
growth curve.			10.000
b. The carrying capacity for rabbits	£		
is	rabbits		
c. During which month were the	P 40		
rabbits in exponential growth?	o li		
	Jo and	1	
	[20]	/ 	
	5		
	May 1st j	une 1st Aug 1st	Sept 1st
Graph 2: Average Toe Length	manusanus v. l		and the same of
	Yes	r 2000	
a. In 1800, about how many people	120		
surveyed had a 3 cm toe?			
How many in 2000?			
b. The data shows the	Number of people (in thousands)		
selection has	७ छूँ वै		1-1-1
c. In 2000, what is the average toe	₩ 6 H H H		
ength? What is the	皇事 十十十十		
average toe length in 1800	Şε ⁴⁰ + + / / 	-}	 .
	20 1		4-1-1
	20 1	4	
	2 3		
	· · · · · · · · · · · · · · · · · · ·	of big toe (in centime	~&~ w~\
Graph 2: Maying and 110	· .	, nià me (ili celitilik	aters)
Graph 3: Mexico and US	(a) Mexico	Age (b) U	Inited States
a. In Mexico, what percentage of	■ Male A	80+	
he population is between 0-4 years	■ Female ★	75 - 79 70 - 74	
of age? In the US?		65 - 69	
		60 - 64 55 - 59	
. Which population is growing the		50 - 54 45 - 49	
astest?		40 - 44	
:. Which age group has the		35 39 30 34	

2

Percentage of population

Graph 3: Mexico and US

length?

c. Which age group has the smallest number in both countries?

Chart 4: Trapping Geese

In order to estimate the population of geese in Northern Wisconsin, ecologists marked 10 geese and then released them back into the population. Over a 6 year period, geese were trapped and their numbers recorded.

a. Use the formula to calculate the estimated number of geese in the area studied?

b.	This	technique	is	called	8

c. Supposing more of the geese found in the trap had the mark, would the estimated number of geese in the area be greater or lesser?

Chart 5: Mushroom Plots

Another ecologist uses a different method to estimate the number of mushrooms in a forest. She plots a 10x10 area and randomly chooses 5 spots, where she counts the number of mushrooms in the plots and records them on the grid.

a.Calculate the number of	f mushrooms in the fores
pased on the grid data:	

b. Thie technique is called ____

Chart 6: Snakes & Mice

The data shows populations of snake and mice found in an experimental field.

a. During which year was the mouse population at zero population growth?

b. What is the carrying capacity for snakes?

c. What is the carrying capacity for mice?

d. What is the rate of growth (r) for mice during 1970?

______ During 1980?

Year	Geese Trapped	Number with Mark
1980	10	1
1981	15	1
1982	12	1
1983	8	0
1984	5	2
1985	10	1

(Total number captured) x (number marked)

(total number recaptured with mark)

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Year	Snakes	Mice born	Mice died
1960	2	1000	200
1970	10	800	300
1980	30	400	500
1990	15	600	550
2000	14	620	600
2001	15	640	580