

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Period: \_\_\_\_\_

## Lessons from the Wolf

Week # \_\_\_\_\_

### Stop and Think – A

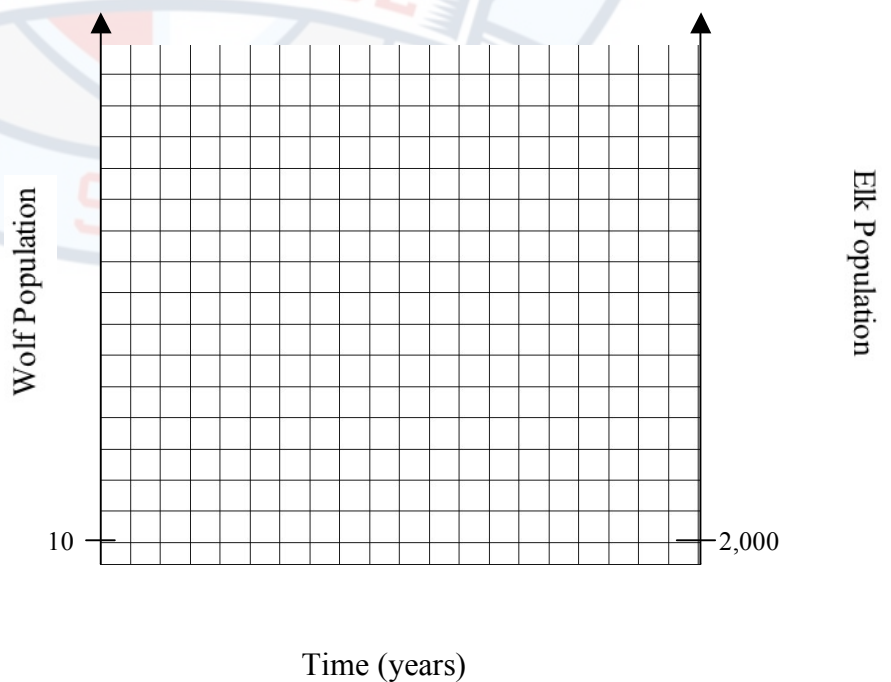
1. What observation about the Lamar Valley excites scientists? \_\_\_\_\_  
\_\_\_\_\_
2. According to Ripple, “You can see that elk haven’t eaten these trees this year, and in fact haven’t eaten them since 1998.” What does this observation suggest about the elk in Lamar Valley?  
\_\_\_\_\_  
\_\_\_\_\_
3. Sketch two pictures: one showing the trees in Lamar Valley before 1995, and the other showing the trees in Lamar Valley after 1995.

Before 1995	After 1995
	

### Stop and Think – B

4. Complete the data table below for the wolf population. Then graph the wolf population over time.

Year	Wolf	Elk
1990		20,000
1995		18,500
1996		15,000
1998		8,000



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5. Describe the interaction between wolves and elk using the words *predator* and *prey*.

\_\_\_\_\_

\_\_\_\_\_

6. Describe how the sizes of both populations have been affected by this interaction.

\_\_\_\_\_

\_\_\_\_\_

### Stop and Think – C

7. What is the wolf effect? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

8. How does the wolf effect explain the size of the tree population? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

9. The author describes the “ecology of fear” caused by the wolves. How have the elk changed their behavior due to this fear? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### Stop and Think – D

10. Why are scientists interested in studying the wolf effect in Yellowstone? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### Stop and Think – E

11. Show how energy flows in the food web below.



12. How have the wolves affected the scavenger population? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### Stop and Think – F

13. How do beavers interact with the abiotic factors in their environment? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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## Wolf Effect Summary

Week # \_\_\_\_\_

*Directions: Explain how the wolf has affected the items in each box.*

Elk		Trees		Trees		Beavers	
							
							
							
Beavers		River banks		River banks		Fish	