

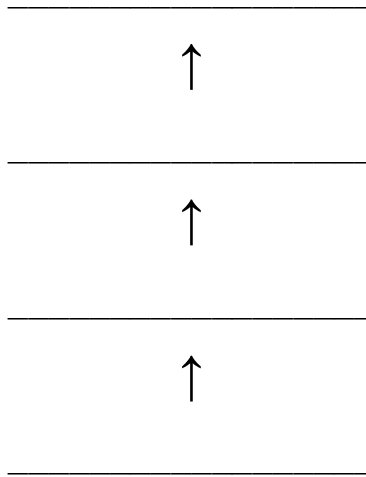
Name: EXAMPLE WORKSHEET

Date: _____

Lake Invaders Exercise 3: Big Fish Little Fish

1. What do the pike eat? _____

2. Draw a new food chain that includes all four species:



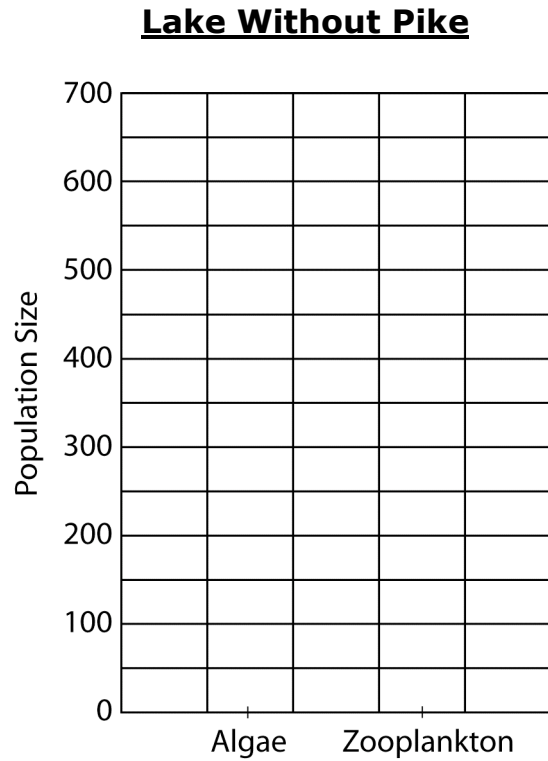
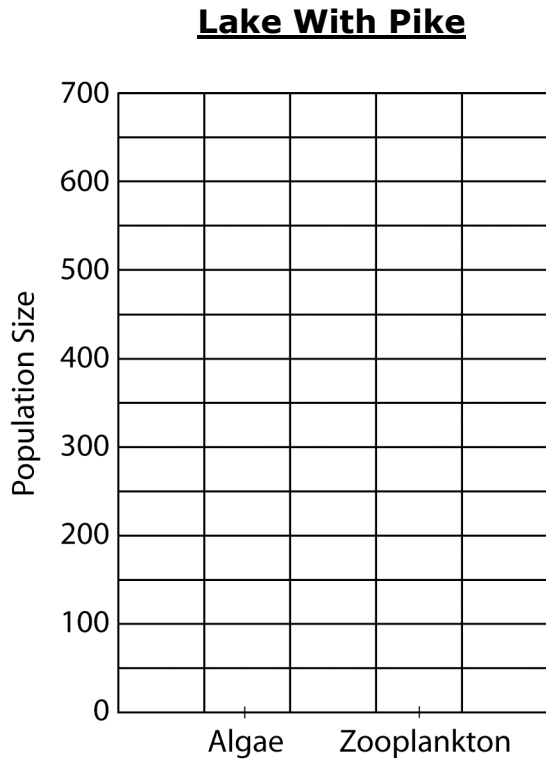
3. Based on your food chain, what do you think will happen to the algae population sizes when all of the pike are removed? Explain your answer.

4. Record your data from week 0 in the data table. Remember you can get the exact number by clicking on the data table.

5. Record your data from week 52 in the data table:

	Algae	Zooplankton	Trout	Pike
Lake with Pike				
Lake without Pike				

6. Using the graph paper below, create two bar graphs. These graphs will show the changes in the algae and zooplankton population sizes before and after pike were removed.



7. Describe what your charts show. How did your results compare to your predictions? _____
- _____
- _____
- _____
- _____

8. Predict what will happen to the algae population when pike are added back into the lake. Explain your answer. _____

9. Using your data, describe what happened. Did the populations increase or decrease in size? _____

10. Circle the answers in the following sentence that best fit your results.

Adding pike to a lake with trout, zooplankton, and algae causes the trout population to **increase / decrease** which causes the zooplankton population to **increase / decrease** which causes algae population to **increase / decrease**.

11. If you had a lake with 5 trophic levels and eliminated the top predator, what would happen to the algae population? Explain your reasoning. A diagram might be helpful.