

Extension Worksheet 1

Name: _____ Class: _____ Date: _____

1. A group of students did an experiment to measure the effect of light intensity on the efficiency of photosynthesis in plants. They took 10 elodea plants, put each in a test tube with water and put them under lamps of differing intensity. They then counted the number of bubbles produced in each tube over one hour. The results are shown in the following table:

Variables	Plant									
	1	2	3	4	5	6	7	8	9	10
Brightness of the lamp (Watt)	20	40	60	80	100	120	140	160	180	200
Number of bubbles	178	207	223	258	297	358	389	323	251	201

According to the information, answer the questions.

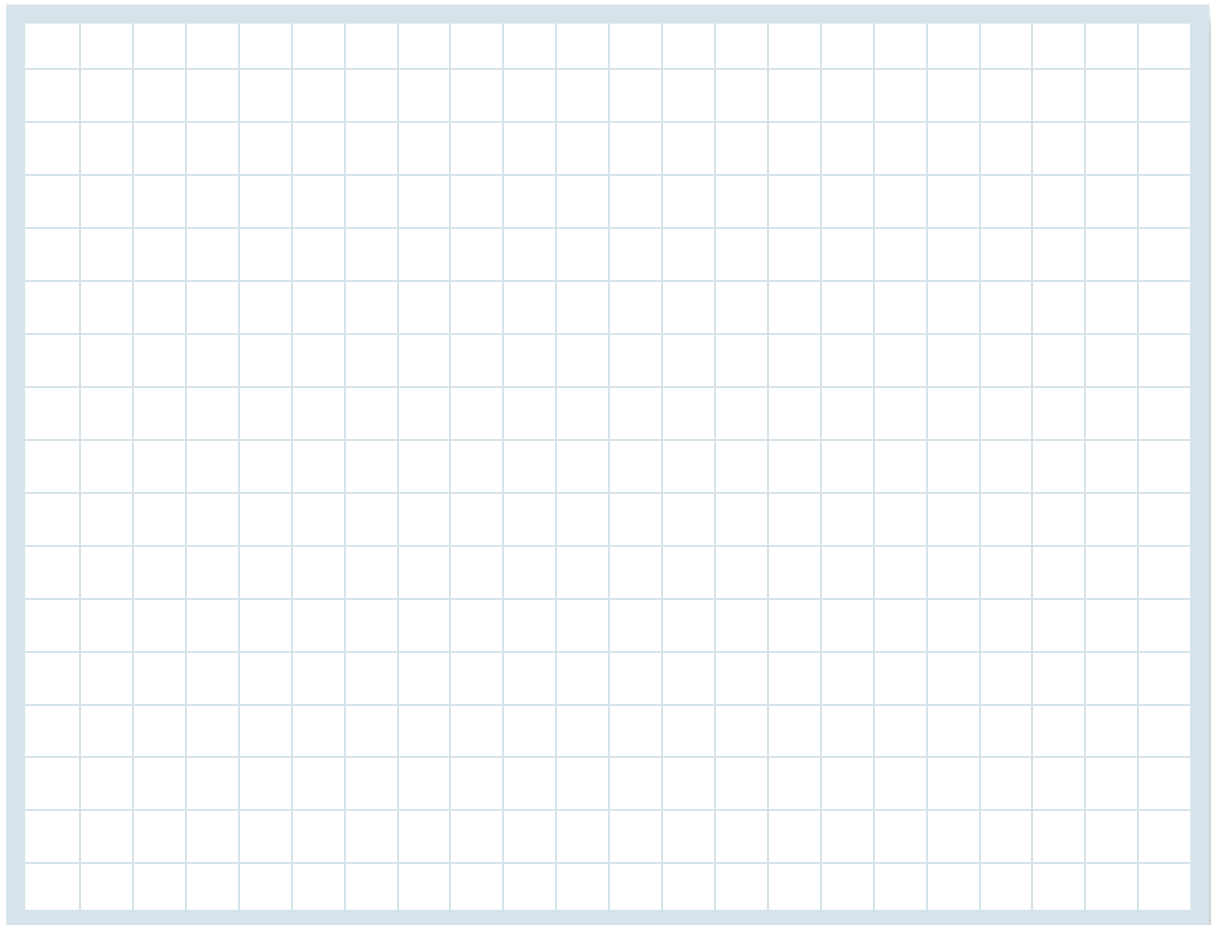
- a. What are the variables in this experiment?

- b. Under which intensity of light is photosynthesis most efficient in elodea plants?

- c. According to the table data, is it correct to affirm that photosynthesis is always more efficient under more intense light? Explain.

- d.** Considering the products of photosynthesis, what other variable could you measure?

- e.** Create a graph using the information from the table.



- f.** According to the experiment, what effect does light intensity have on the process of photosynthesis?

Extension Worksheet 2

Name: _____ Class: _____ Date: _____

1. A class visits a nature reserve every year, and the students record the populations of animals there. The following tables show the information recorded in 2005 and in 2012.

Records from 2005	
Species	Number
Worm	38
Thrush	26
Sparrow	23
Hawk	13
Fox	3


Records from 2012	
Species	Number
Worm	17
Thrush	14
Sparrow	0
Hawk	2
Fox	0

In 2007, farmers started using the land next to the reserve for agriculture. Taking this into account, answer the questions.

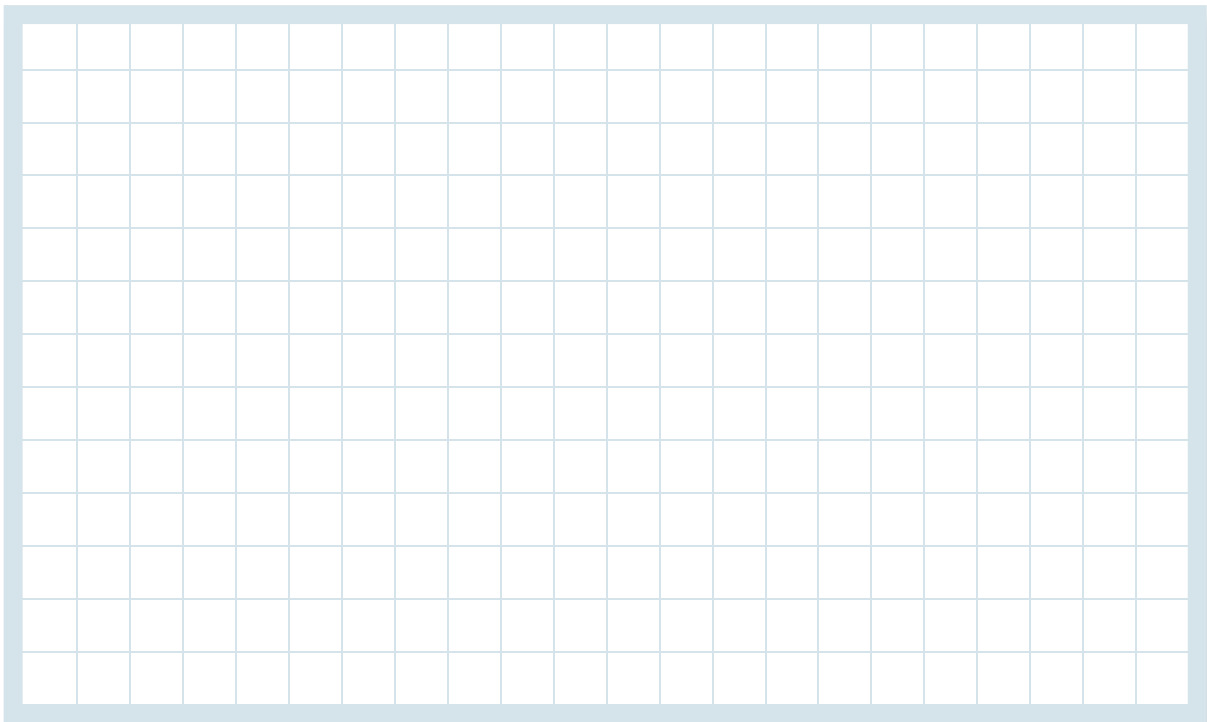
- a. What has happened to the animal populations in the study?

- b. What can the differences in the records be attributed to? Explain.

- c.** Draw a food chain with some of the species in the study.



- d.** Create a graph comparing the information from both years.



- e.** What measures would you propose to protect the living things in this reserve?
