

PLOT YOUR PROFITS

1. Your task is to plan a commercial garden on the **GARDEN PLOT SHEET**, which represents 1 acre of land (43,560 ft²). Each square (there are 100) represents 1:100 of your acre, or 1%.
2. Choose from the list of the following crops and decide how much area of each you will plant in your 1-acre garden. You must choose at least 5 different crops, but no more than 10.

Green Beans	Potatoes
Broccoli	Winter Squash
Cabbage	Summer Squash
Cantaloupe	Sweet Corn
Cucumber	Sweet Potatoes
Eggplant	Tomatoes
Okra	Watermelon
Bell Peppers	Strawberries
Jalapeño Peppers	Grapes

3. Decide on a color key to represent each crop to complete the legend. You may also label the sections of blocks on the grid to make your plot design more clear.
4. You may also choose to create a logo for your garden in the block on your sheet.
5. You will then begin to fill out the **GARDEN CROP DATA SHEET**. Count the number of blocks you chose for each crop and then calculate the area and percentage of the acre. Use the numbers in the **NOTES** section to help you do this.
6. Your teacher will then provide you with the most recent annual return per acre for each crop so you may calculate your profit.

HELP: You may do this by multiplying the % area of your crop times the profit per acre OR multiply the number of block times the profit per block.

7. Add the profit for each crop for a total profit and compare your profits with the other students.
8. Then create two pie charts to represent 1) the area dedicated to each crop, and 2) the profit for each crop. Be sure to write in the percentages for each.
9. Finish this exercise by answering the additional questions on the worksheet. Perimeter is $2 \times \text{length} + 2 \times \text{width}$.
10. To continue this activity, your teacher may give you scenarios each week which may increase or decrease your profits depending on the crops you chose to grow. Keep a running total on the **GARDEN CROP PROFIT** sheet to keep track.
11. Complete the activity by answering the assessment questions listed on the **GARDEN CROP PROFIT** sheet.
12. Extension 1: View the Kentucky school garden calendar provided by your teacher or found at kyreadyssetgrow.org to determine how to grow more than one crop in a year on the same plot of land. Calculate your profits.
13. Extension 2: View the crop budget sheets provided at kyreadyssetgrow.org and develop a garden business plan you could implement based on the resources you have available to you. Are there areas where you could reduce expenses or ways to increase production? You may also want to visit a farmer's market to see what prices are received by marketing crops directly to consumers.

GARDEN CROP PROFIT

Crop	Week 1	Week 2	Week 3	Week 4	Week 6	Week 7	Week 8
Totals							

List the scenarios below that affected your profits:

Assessment - Answer the following questions:

1. Name 3 factors that caused your profits to increase.
2. What had the largest negative impact on your profit?
3. If this had been a real farm scenario, would you have been able to control what happened? Why or why not?
4. What would you have done differently in the beginning to maximize your profits?