Community Garden Festival

3rd Grade Math Project · Gardens & Nature

Grade 3 · Advanced

Name: _____ Date: _____ Class: _____

The Challenge

Our town is holding a garden festival! Your team plans the beds, the watering, the harvest report and the fences.

You will make: Garden Festival Plan

I can…

- I can name, compare and find equivalent fractions of a garden bed.
- I can solve time, liquid volume and mass problems.
- I can graph data and find area and perimeter of garden plots.

Materials

- Pencil
- Grid paper
- Ruler

Steps

1. Part 1: Fraction Beds (Unit 6)
2. Part 2: Equal and Compare (Unit 7)
3. Part 3: Watering Day (Unit 8)
4. Part 4: Harvest Graph (Unit 9)
5. Part 5: Plots and Fences (Units 10–11)
6. Part 6: Design Challenge
7. Check your work and share your garden festival plan.

Part 1: Fraction Beds (Unit 6)

Bed A is split into 8 equal parts.

1. Tomatoes fill 3 parts. What fraction is tomatoes?

2. Where is $\frac{3}{8}$ on a number line from 0 to 1 marked in eighths?

Part 2: Equal and Compare (Unit 7)

Bed B is split into 4 equal parts. Bed C is the same size as Bed A.

3. Herbs fill $\frac{2}{4}$ of Bed B. How many eighths of Bed A is the same amount?

4. Compare $\frac{3}{8}$ and $\frac{3}{4}$ of the same size bed. Which is more?

Part 3: Watering Day (Unit 8)

Watering starts at 8:45 and takes 50 minutes. The garden uses 8 cans of 7 liters.

5. What time does watering end?

6. How many liters of water are used?

Part 4: Harvest Graph (Unit 9)

The harvest (in pounds) is shown in the table. Make a bar graph with a scale of 5.

Crop	Pounds
Beans	30
Carrots	45
Squash	20
Peppers	35

7. How many more pounds of carrots than squash?

8. How many fewer pounds of beans than carrots and squash together?

Part 5: Plots and Fences (Units 10–11)

Each bed is a rectangle 8 feet by 6 feet.

9. What is the area of one bed?

10. How many feet of fence go around one bed?

11. Two beds are placed side by side along their long sides to make one big rectangle. What is its area?

Part 6: Design Challenge

Design an L-shaped herb garden with area 30 square feet using two rectangles.

12. Give side lengths for both rectangles and show the total area.

13. Find the perimeter of your L shape.

Extension Challenge

A 1-yard ribbon is cut into fourths for prize ribbons. How many prize ribbons from 3 yards?

How your project will be scored

Learning target	4 Exceeds	3 Meets	2 Approaching	1 Beginning
I can name, compare and find equivalent fractions of a garden bed.	Correct and complete; explains how	Mostly correct	Partly correct	Not yet
I can solve time, liquid volume and mass problems.	Correct and complete; explains how	Mostly correct	Partly correct	Not yet
I can graph data and find area and perimeter of garden plots.	Correct and complete; explains how	Mostly correct	Partly correct	Not yet
I can explain my thinking with pictures, numbers and words.	Clear for every part	Clear for most parts	Some explanation	Little explanation
My garden festival plan is complete and matches my math.	Complete, neat, accurate	Complete	Partly complete	Not complete