

Garden Plot Fractions

3rd Grade Math Project · Gardens & Nature

Grade 3 · Advanced

Name: _____ Date: _____ Class: _____

The Challenge

Our class is planting a garden! The beds must be split into equal parts, and the path needs fraction markers.

You will make: Garden Map

I can…

- I can name a unit fraction for one of b equal parts.
- I can explain a/b as a copies of 1/b.
- I can place fractions on a number line, including fractions greater than 1.

Materials

- Pencil
- Grid paper
- Colored pencils

Steps

1. Part 1: Garden Beds
2. Part 2: Equal or Not?
3. Part 3: Fraction Trail
4. Part 4: Design Challenge
5. Check your work and share your garden map.

Part 1: Garden Beds

Bed A is a rectangle split into 8 equal parts.

Plant	Parts	Fraction
Carrots	3	
Beans	2	
Empty		

1. What fraction of the bed is one part?

2. Carrots fill 3 parts. What fraction of the bed is carrots?

3. Beans fill 2 parts. What fraction of the bed is beans?

4. What fraction of the bed is still empty?

Part 2: Equal or Not?

Mia split Bed B into 4 parts: two big and two small.

5. Can each part be called $\frac{1}{4}$ of the bed? Explain.

Part 3: Fraction Trail

The garden path from the gate (0) to the fountain (1) is marked in thirds. It keeps going to the shed at 2.

6. Where is the first marker? Write a fraction.

7. A bird bath is 7 jumps from the gate. What fraction is that?

8. Is the bird bath before or after the fountain at 1? How do you know?

Part 4: Design Challenge

Design Bed C (a rectangle on grid paper) for 4 plants.

9. Use eighths. Tomatoes $\frac{3}{8}$, peppers $\frac{2}{8}$, herbs $\frac{2}{8}$ and flowers the rest. What fraction is flowers?

10. Draw it so all parts have equal area even if they are different shapes. Explain how you know.

Extension Challenge

The path goes from 0 to 2 in fourths. Name every marker past 1.

How your project will be scored

Learning target	4 Exceeds	3 Meets	2 Approaching	1 Beginning
I can name a unit fraction for one of b equal parts.	Correct and complete; explains how	Mostly correct	Partly correct	Not yet
I can explain a/b as a copies of 1/b.	Correct and complete; explains how	Mostly correct	Partly correct	Not yet
I can place fractions on a number line, including fractions greater than 1.	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 map is complete and matches my math.	Complete, neat, accurate	Complete	Partly complete	Not complete