

CORE Assessment Module Module Overview

Content Area	Mathematics
Title	Lashelle’s Garden
Grade Level	Grade 3
Problem Type	Performance Task
Standards for Mathematical Practices	<p>Mathematical Practice 2: Reason abstractly and quantitatively.</p> <p>Mathematically proficient students:</p> <ul style="list-style-type: none"> • Make sense of quantities and their relationships in problem situations. • Bring two complementary abilities to bear on problems involving quantitative relationships: <ul style="list-style-type: none"> ○ Decontextualize—to abstract a given situation and represent it symbolically; and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents) and ○ Contextualize—to pause as needed during the manipulation process in order to probe into the referents for the symbols involved). • Use quantitative reasoning that entails creating a coherent representation of the problem at hand, considering the units involved, attending to the meaning of quantities (not just how to compute them) and knowing and flexibly using different properties of operations and objects.
Common Core State Standards	<p>3.OA3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</p> <p>3.MD5 Recognize area as an attribute of plane figures and understand concepts of area measurement.</p> <p>3.MD7a Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.</p> <p>3.MD7b Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.</p>
SBAC Assessment Claims	Claim 2: Problem Solving —Students can solve a range of complex well-posed problems in pure and applied mathematics, making productive use of knowledge and problem solving strategies.
Task Overview	Students will be asked to determine the area of a given diagram. Using this information, they will deconstruct it and then apply it to a new area model.
Module Components	1) Scoring Guide 2) Performance Task

Lashelle's Garden Scoring Guide

Description	Points	Total Points
Credit for specific aspects of performance should be given as follows:		
1. Student gives correct answer: 60 square feet Response should include some of these “look-for” phrases: <ul style="list-style-type: none"> • I drew a rectangle and labeled the length, 10 feet, and the width, 6 feet. I used the formula $a = l \times w$, so 10 feet \times 6 feet = 60 square feet. • I drew 6 rows of 10. • I multiplied 6×10. (Credit could be given for incorrect arithmetic, but correct process)	1 1	2
2. Student gives correct answer: 12 square feet Student work includes two different ways of solving: <ul style="list-style-type: none"> • I multiplied 4×3. • I drew lines on the rectangle and counted squares. • I drew 4 rows of 3 and counted. (Credit could be given for incorrect arithmetic, but correct process)	1 1 1	3
3. Student gives correct answer: The tomato section covers the greatest area. Student work should include the area for each section to prove which is the greatest. Tomatoes: 18 square feet Watermelon: 16 square feet Cucumbers: 14 square feet Carrots: 12 square feet	1 1	2
4. Student gives correct answer: 42 square feet Student shows work (This may include: $60 - 18 = 42$ square feet or $6 \times 7 = 42$. Credit could be given for incorrect arithmetic, but correct process)	1 1	2
5. Student's diagram should show an area equal to 60 square feet with 6 different sections for plants. Areas are given for all 6 fruits and vegetables.	2 $\frac{1}{2}$ each	5
TOTAL POINTS: (possible points = 14 points)		

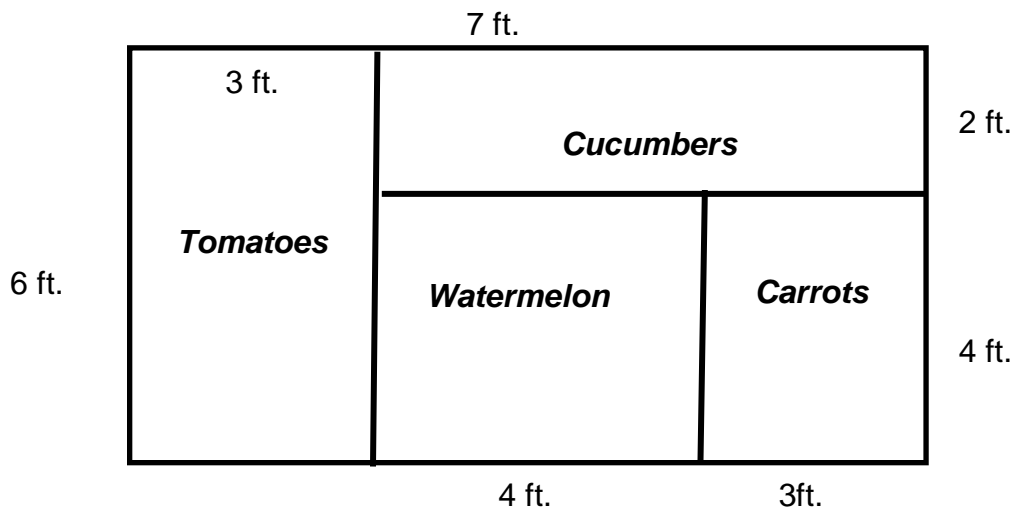
Lashelle's Garden



This spring, Lashelle is going to plant a garden. She is planting cucumbers, tomatoes, watermelons, and carrots.

1. Lashelle's garden is 10 feet long and 6 feet wide. What is the area of her garden? How did you figure this out?

The diagram below shows what Lashelle is planting in each section of her garden. Use this diagram to answer the questions below.



2. How many square feet of Lashelle's garden will be planted with carrots? What are two ways you could figure this out?

Student Name _____

3. Which section of Lashelle's garden covers the greatest area? How do you know your answer is correct?

4. Next year, Lashelle is not using the tomato section of her garden. What will be the area of her garden next year? How did you figure this out?

Student Name _____

5. Help Lashelle redesign her garden for next year. Include an area for six new fruits and vegetables. Use the same area (6 feet by 10 feet) for the garden. Draw your new garden on the grid below and give the area planted with each of the fruits and vegetables.

