LESSON MAKER PRO

Square Space Detectives

Count unit squares to measure area.

GRADE 3 · 3.MG.2.a.ii

3.MG.2.a.ii "Solve problems, including those in context, involving area: estimate and determine the area of a given surface by counting the number of square units, describe the measurement (using the number and unit) and justify the measurement."

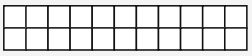
NAME _____ DATE _____

COUNT THE SQUARE UNITS

Area tells how much flat space a surface covers. Count the equal square units in the surface, then name the measurement in square units. You can make an estimate first, then count to find the exact area.

WORKED EXAMPLE

What is the area of the rectangle shown? Each small square is 1 square unit.

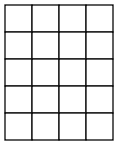


1. Count 11 squares in each row.
2. Count 2 rows.
3. Add 11 + 11 = 22.

Answer: 22 square units

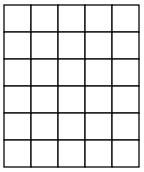
PRACTICE 6 problems

1 What is the area of the rectangle shown? Each small square is 1 square unit.



ANSWER _____

2 How many square units cover the rectangle shown? Explain how the rows help you count.



ANSWER _____

3 A rectangle is made of 8 rows of 4 square tiles. What is its area? Show why.

ANSWER _____

4 A notebook cover has 9 rows of 5 square units. Determine its area.

ANSWER _____

5 A rectangular desk mat has 10 rows of 6 square units. What is its area? Name the unit.

ANSWER _____

6 A mat has 5 rows of 8 equal square units. Is its area closer to 30, 40, or 50 square units? Then find the exact area.

ANSWER _____

APPLY IT Show your work

1 Maya is making a board for a marble game. She covers it with 9 rows of 6 square tiles. Each tile covers 1 square unit. What area does the board cover? Explain how you know.

WORK SPACE

ANSWER _____

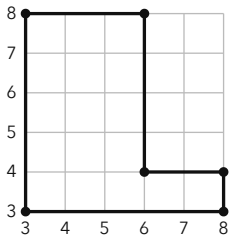
2 At a school art show, a display has 8 rows with 8 paper squares in each row. Each paper square covers 1 square unit. What is the area of the display?

WORK SPACE

ANSWER _____

CHALLENGE One step up

The outlined floor shape is drawn on a unit grid. What is its area? Explain how you can split the shape into rectangles to count the square units.



WORK SPACE AND ANSWER

ANSWER KEY

Square Space Detectives

GRADE 3 · 3.MG.2.a.ii

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	What is the area of the rectangle shown? Each small square is 1 square unit.	**20 square units**
2	How many square units cover the rectangle shown? Explain how the rows help you count.	**30 square units; there are 6 rows of 5 squares.**
3	A rectangle is made of 8 rows of 4 square tiles. What is its area? Show why.	**32 square units; 8 rows of 4 tiles make 32 tiles.**
4	A notebook cover has 9 rows of 5 square units. Determine its area.	**45 square units**
5	A rectangular desk mat has 10 rows of 6 square units. What is its area? Name the unit.	**60 square units**
6	A mat has 5 rows of 8 equal square units. Is its area closer to 30, 40, or 50 square units? Then find the exact area.	**Closer to 40 square units; exactly 40 square units**

PART 2 · APPLY IT

1. **54 square units; 9 rows of 6 tiles make 54 tiles.** Count 9 groups of 6 tiles. Since each tile is 1 square unit, the board covers 54 square units.
2. **64 square units** Count 8 rows of 8 paper squares. The display covers 64 square units.

CHALLENGE

17 square units; split it into a bottom rectangle with 5 square units and a left rectangle with 12 square units. Then add 5 + 12 = 17.

Accept equivalent counting explanations that correctly identify the total number of unit squares. Require the unit words, square units, in area measurements.