

Unit 5 Module 4 Session 3

Problems & Investigations- Measuring Area in Customary Units

Getting Ready-

- SB 181 Measuring My Math Journal
- Colored tiles (at least 80 per student pair)
- 12" × 12" piece of construction paper in a light color
- 36" × 36" piece of butcher paper in a different light color
- Rulers (class set)
- yardstick or measuring tape
- blue masking tape
- Resource card for Area

VOCABULARY

Area

Dimension

Estimate

Measure

Square

Square Unit

Rectangle



- Demonstrate an understanding that a plane figure that can be covered without gaps or overlaps by n unit squares has an area of n square units
- Demonstrate an understanding that a square with a side length of 1 unit is called a "unit square" and has 1 square unit of area
- Demonstrate an understanding that unit squares can be used to measure the areas of other plane figures
- Measure the area of a plane figure by counting the number of square units that cover it
- Find the area of a rectangle with whole-number side lengths by tiling it

Remind me
what **area** is.

area



feet

rulers

yardstick

paper clip

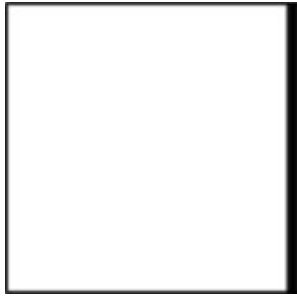
Standard VS Non-Standard units

inches

centimeters

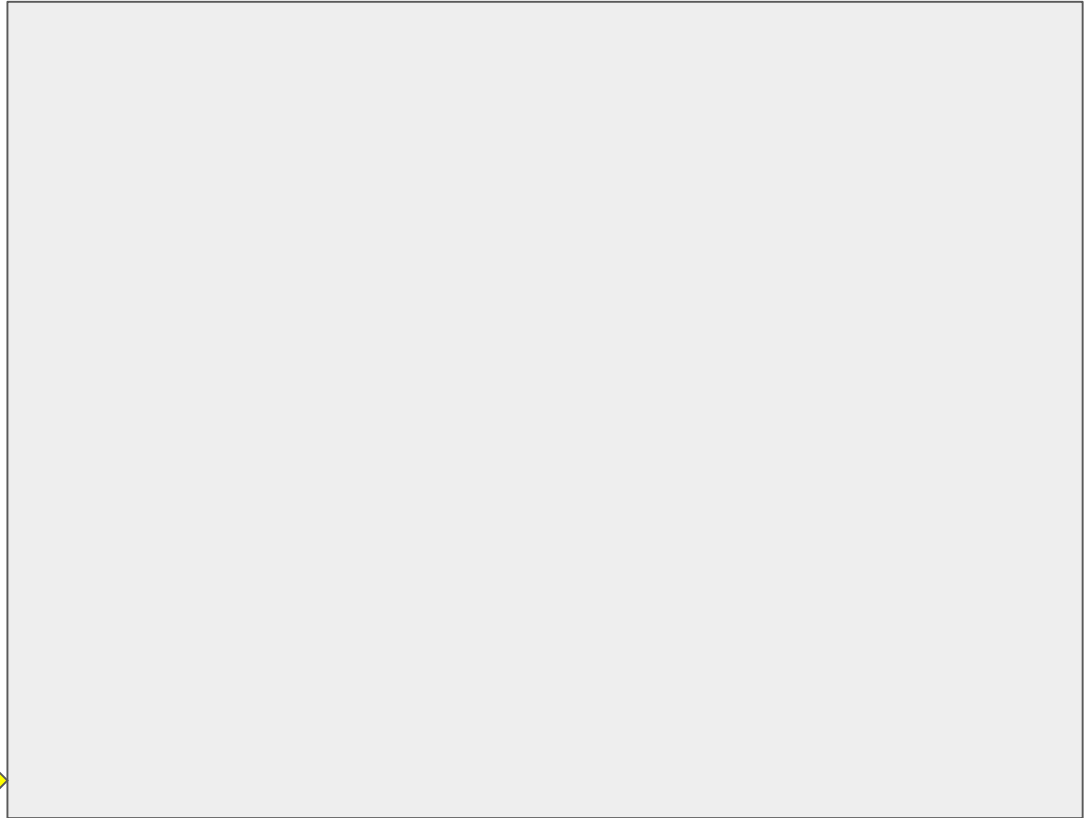
Popsicle
stick

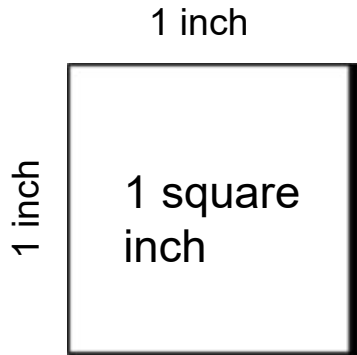
Why do you think people usually measure length in inches and feet instead of paper clips and Popsicle sticks?



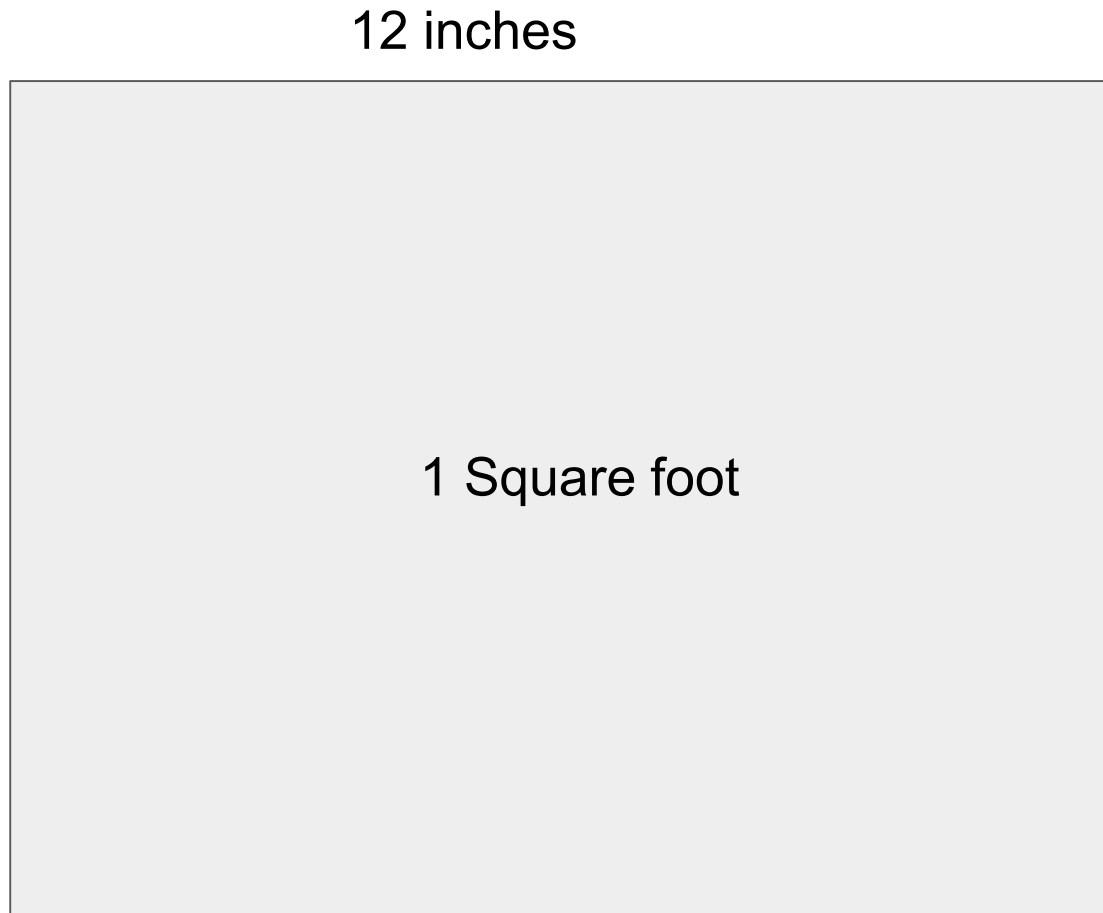
1. Using your ruler,
measure one of
your tiles. Find the
height and width

2 Thinking of your
tiles, what do you
think the area of
this square is?

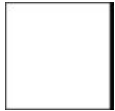




12 inches



1 square
inch



?

1 square
inch

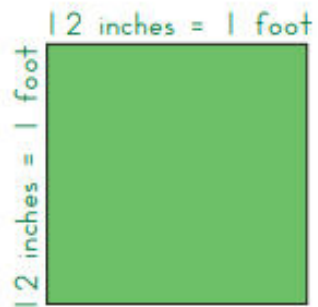


1
square
yard

1 inch
1 inch → 

Dimensions $1'' \times 1''$

Area: 1 square inch



Dimensions $12'' \times 12''$

Area: 1 square foot

36 inches = 1 yard



Dimensions $36'' \times 36''$

Area: 1 square yard

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Please



Measuring My Math Journal

- 1** Estimate the area of the front cover of your math journal in square inches.

Estimate: _____

- 2** Using measurement tools from your classroom (ruler, tiles, grid paper, etc.), determine the area of the front cover of your math journal in square inches. Use words, labeled sketches, and numbers to explain how you got your answer.

Area of my math journal _____:

- 3** **CHALLENGE** If you were to make a book cover for your entire math journal, front and back, approximately how many square inches of paper would you need? Explain your answer below.

Work Places

4C Target One Thousand

4D Hexagon Spin & Fill

5A Solving Game Store Problems

5B Scout them Out

5C Line 'Em Up

5D Division Capture

Daily Practice

SB 182 Areas to Find

Home Connection

HC 97-98 Unit 5 Review