Unit 10 · Area Cheat Sheet

Unit 10 focus: unit squares and measuring area by counting

1 Big Idea

Area is how many unit squares cover a shape with no gaps and no overlaps. Name area in square units.

2 Important Vocabulary

area	The number of unit squares that cover a flat shape.	a 3 by 4 rectangle has an area of 12 square units
unit square	A square with sides of 1 unit; its area is 1 square unit.	□ = 1 square unit
square unit	A unit for measuring area.	square centimeters, square inches, square feet, square meters
tile	Cover a shape with unit squares with no gaps or overlaps.	tile a rectangle with 12 squares

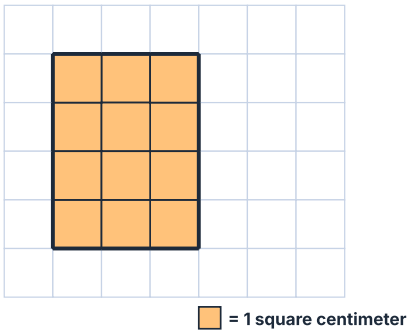
3 How It Works

Each square is 1 square centimeter. A shape is covered by 4 rows of 3 squares.

Example: Count or multiply
Rows: 4
Squares in each row: 3
Area: 4 × 3 = 12

Answer: 12 square centimeters

4 Visual Model



12 unit squares cover the rectangle: 12 square centimeters.

5 ★ Remember This · Watch Out!

★ Remember this

- Count every square once.
- Units: square centimeters, square inches, square feet, square meters.

⚠ Watch out!

- **Counting the edge:** that is perimeter, not area
- **Wrong unit:** write square units, not just units

6 Try It!

1. A shape covers 15 unit squares. Area?
   Answer: 15 square units
2. A 2 by 6 rectangle of square inches. Area?
   Answer: 12 square inches

Answers are printed upside down. Turn the page to check!

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More practice: area of rectangles, the distributive property and rectilinear figures

1 Big Idea

Multiply the side lengths to find the area of a rectangle. Split a big rectangle or an L shape into smaller rectangles and add the areas.

2 Important Vocabulary

length and width	The side lengths of a rectangle.	6 feet long and 3 feet wide
rectilinear figure	A shape with only right angles, made of rectangles.	an L-shaped room
decompose	Break a shape or number into smaller parts.	split an L shape into 2 rectangles
overlap	When tiles cover the same space twice.	overlapping tiles are counted twice

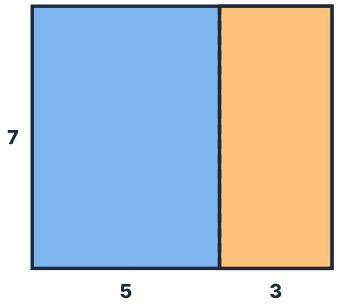
3 How It Works

Find the area of a 7 by 8 rectangle by splitting 8 into 5 + 3.

Example: 7 × 8 = (7 × 5) + (7 × 3)
7 × 5 = 35
7 × 3 = 21
Add: 35 + 21 = 56

Answer: 56 square units

4 Visual Model



A 7 by 8 rectangle split into 7 by 5 and 7 by 3.

5 ★ Remember This · Watch Out!

★ Remember this

- Area of a rectangle = length × width.
- L shapes: split, find each area, add.

⚠ Watch out!

- **Adding the sides:** 3 by 5 is 15, not 8
- **Counting the middle twice:** the parts must not overlap

6 Try It!

1. A rug is 6 feet by 4 feet. Area?
   Answer: 24 square feet
2. (5 × 6) + (5 × 2) = ?
   Answer: 40

Answers are printed upside down. Turn the page to check!