Name & Surname: _____ Class: _____ Date: _____

Cover It to Measure Area

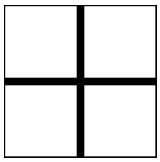
Count squares to find flat space.

About 30 minutes Level ★★★☆☆

What Is Area?

Area is how much flat space a plane figure covers.

- Area is the flat inside, not the edge around.
- Measure by covering with same-size **square units**.
- Push squares together with no **gaps** or overlaps, then count.
- Write the total in square units, like square inches.



Task A

/2

Count square units by rows to find area.

WORKED EXAMPLE

A rectangle is covered by 3 rows with 4 squares in each row. Find the area.

1. Count squares in one row: 4
2. Count rows: 3
3. Count by rows: 4, 8, 12

Answer: 12 square units

YOUR TURN

A rectangle is covered by 2 rows with 5 squares in each row. Find the area.

Answer: _____

WORKED EXAMPLE

A shape is covered by 9 same-size squares with no gaps or overlaps. Find the area.

1. Check squares are the same size
2. Check no gaps or overlaps
3. Count all squares: 9

Answer: 9 square units

YOUR TURN

A shape is covered by 4 rows with 3 squares in each row. Find the area.

Answer: _____

Created with LessonDino.com · AI lesson planner with checkable sources

Count the Squares

Practice counting squares to find area.

Key words

area: how much flat space a shape covers

square unit: a small same-size tile with four equal sides we count with

overlap: when squares pile on each other

plane figure: a flat shape, like a rectangle

gap: an empty space left between squares

Task B

/10

Count square units to find area. No gaps, no overlaps.

WARM UP

1 A shape is covered by 5 same-size squares. What is its **area**?

Answer: _____

2 A rectangle shows 1 row with 6 squares. What is its area?

Answer: _____

3 A rectangle has 2 rows with 3 squares in each row. Count 3, 6 to find the area.

Answer: _____

4 Is area the flat inside or the edge around?

Answer: _____

PRACTICE

5 A rectangle holds 3 rows with 4 squares in each row. Count by rows to find the **area**.

Answer: _____

6 A rectangle holds 4 rows with 2 squares in each row. What is its area?

Answer: _____

7 A student covers a shape but leaves gaps between squares. Is the count the area? Explain.

Answer: _____

PROBLEM SOLVING

8 A book cover is covered with 3 rows of 5 sticky-note squares with no overlaps. What is the area?

Answer: _____

9 Two shapes both use 12 same-size squares. One is long and thin, one is short and wide. Do they have the same area? Explain how you know.

Answer: _____

10 A rug needs 6 rows of 4 floor-tile squares. What is the area of the rug?

Answer: _____

Created with LessonDino.com · AI lesson planner with checkable sources

Keep It Fair

Use fair rules to measure area correctly.

Task C

/10

Use fair rules to measure area correctly.

WARM UP

1 Why must the squares be the **same size**?

Answer: _____

2 A shape is covered with 9 same-size squares pushed together. What is the area?

Answer: _____

3 A rectangle has 5 rows with 2 squares in each row. Find the area.

Answer: _____

4 A student counts 11 squares but 2 squares overlap. Is 11 the correct **area**?

Answer: _____

PRACTICE

5 Rectangle C has area 14 square units. Rectangle D has area 9 square units. How many more square units does C have?

Answer: _____

6 A student uses 4 big squares and 4 small squares to cover a shape and says the area is 8. What is the mistake?

Answer: _____

7 A cover shows 3 rows of 6 squares. Write the row counts and total **area**.

Answer: _____

PROBLEM SOLVING

8 To measure a classroom rug, would you use postage-stamp squares or floor-tile squares? Why?

Answer: _____

9 A desk top holds 4 rows of 6 inch squares with no gaps. What is the area in **square inches**?

Answer: _____

10 Explain how you know you counted every square with no gaps.

Answer: _____

Created with LessonDino.com · AI lesson planner with checkable sources

Who Is Right?

Decide which idea about area is correct.

Task D

/3

Read the ideas and decide about area.



Student A

What is area and how do we measure it?

Area is the flat space inside. Cover it with same-size squares with no gaps or overlaps and count.



Student B

Area is the edge around the shape. Just trace the border to find it.



Student C

You can mix big and little squares. Just count them all to get the area faster.



Student D

What do you think of each idea? Why?

Student B: .....

Student C: .....

Student D: .....

Created with LessonDino.com · AI lesson planner with checkable sources

Area in Action

Tell area and edge apart, then count to find area.

Task E

/4

Explain the difference between each pair.

area vs **perimeter**

The difference is...

gap vs **overlap**

The difference is...

Created with LessonDino.com · AI lesson planner with checkable sources

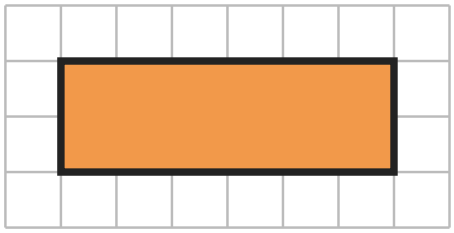
Cover It to Measure Area

Task F

/3

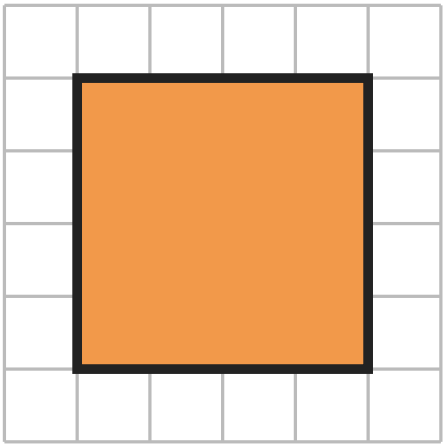
Count **squares** to find the **area**. No gaps.

1



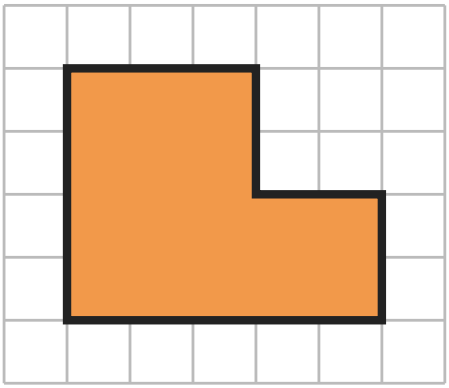
Area: _____ squares

2



Area: _____ squares

3



Area: _____ squares

How did I do?

Circle a face for each line.

I can show where area is on a shape.

I can cover a shape with same-size squares with no gaps.

I can count squares to find area in square units.

Created with LessonDino.com · AI lesson planner with checkable sources

Answer sheet: Cover It to Measure Area

Task A

1. 10 square units
2. 12 square units

Task B

1. 5 square units
2. 6 square units
3. 6 square units
4. the flat inside
5. 12 square units
6. 8 square units
7. No, gaps miss space so you must push together and recount.
8. 15 square units
9. Yes, both have area 12 square units because both are covered by 12 same-size squares.
10. 24 square units

Task C

1. Different sizes give different counts for the same cover.
2. 9 square units
3. 10 square units
4. No, overlaps count space twice so recount with no overlaps.
5. 5 square units
6. He mixed sizes; you must use same-size squares every time.
7. 6, 12, 18; 18 square units
8. Floor-tile squares, because they cover fast and fit the job.
9. 24 square inches
10. I marked each square and counted equal rows in order with no gaps or overlaps.

Task D

Student B: right

Student C: not right

Student D: not right

Student B is right. Area is the flat space a shape covers, measured by counting same-size units with no gaps or overlaps. Student C describes the edge, not the inside. Student D is wrong because mixed sizes give a wrong count.

Task E

1. Area is the flat space inside measured in square units. Perimeter is the distance around the edge.
2. A gap misses space so the count is too low. An overlap counts space twice so the count is too high.

Task F

1. area = 12 squares
2. area = 16 squares
3. area = 16 squares

Pictures: Drawing: No machine-readable author provided. Blotwell assumed (based · Public domain · Wikimedia Commons

Created with LessonDino.com · AI lesson planner with checkable sources