(6) Purpose This activity contains a mixed set of perimeter and area problems where students will determine whether they need to find perimeter or area, then solve. Additionally, students will find missing side lengths when given a perimeter or an area.

About the Problems: Problem \#6 requires students to use what they know that 2-100s makes 200. Problem \#8 gives the picture along with the placement of the string.

## Activity may be useful for:



Activity may be delivered in:


## Setting Up For Instruction

Make I copy of Cover or Go Around? (PG. 2-6) for each student.

## How-To Guide

I. Place students in pairs and hand out materials.
2. Explain the activity.

- Students first decide whether the problem uses perimeter or area and check the box.
- Next students write the information from the problem on the rectangle.
- Then they solve the problem.


## Thought Extenders

-What measures do you know?

- What are the units?
- What does the problem ask you to find? How do you know?
- Do you use perimeter or area to answer the question?
- How do you find perimeter?
- How do you find area?
-What does perimeter mean?
- What does area mean?
- Does the problem ask you to find perimeter or area? How do you know?
- Did you find the measure that the problem asks you to find?
- What is the unit in the solution?


## Answer Key

| I. Perimeter; 110 feet | 4. Perimeter; 74 feet of lights | 7. Area. Yes, she has 2 extra feet. |
| :--- | :--- | :--- |
| 2. Area; 72 slices of bread | 5. Area; 18 pairs of shoes | 8. Perimeter. Yes, she has 2 extra feet. |
| 3. Area; 42 cards | 6. Perimeter; 100 feet |  |

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Directions: Decide whether the problem uses perimeter or area. Then check the box. Draw a rectangle and write the information from the problem. Then solve the problem.
(1) Olivia drove her jeep one lap around a rectangular track. The long sides of the track are each 190 feet long. She drove 600 feet total. How long are the short sides of the track in feet?

| Diagram |  |
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| $\square$ Perimeter $\square$ Area |  |
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(2) Conner is making sandwiches for the homeless shelter. He lays out 9 rows of bread and puts 8 slices in each row. How many slices of bread does he use?

| Diagram |  |
| :---: | :---: |
| $\square$ Perimeter $\square$ Area |  |
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|  | Solution: |

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(3) Emma wants to cover her entire desk in cards. She places 7 cards next to each other to make a row. She makes 6 rows. How many cards does it take to cover her desk?

| Diagram |  |
| :---: | :---: |
| $\square$ Perimeter | $\square$ Area |
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(4) Andrew wants to string holiday lights around the inside of his room. It takes 20 feet of lights on the longer walls and 17 feet of lights on the shorter walls. How many feet of lights does Andrew buy?

| Diagram |  |
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| $\square$ Perimeter $\quad \square$ Area |  |
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(5) Ethan has a closet full of shoes. The closet is long and narrow, so he put his shoes in 3 rows. He put 6 pairs of shoes in each row. How many pairs of shoes does he put in the closet?

| Diagram |  |
| :---: | :---: |
| $\square$ Perimeter | $\square$ Area |
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6 Thomas walked around the edge of a rectangular swimming pool. The pool is 50 feet wide. He walked 300 feet. How long is the pool in feet?

| Diagram | Solution |
| :---: | :---: |
| $\square$ Perimeter | $\square$ Area |
|  |  |

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(7) Jessie bought a new bookshelf, but she isn't sure if it's big enough for her books. The new shelf has 5 rows, and each row is 5 feet long. She needs 23 feet of space for all her books.
a. Does she have enough space?
b. If she has extra space, how much extra space does she have?
c. If she does not have enough space, how much more does she need?

| Diagram | Solution |  |
| :---: | :---: | :---: |
| Perimeter | Area |  |

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8 Margaret wants to tie a string around a box, but she isn't sure if she has enough string. The box is I3 inches long and 20 inches wide. Once she has wrapped the box, she will need 9 more inches of string to tie a bow. She has 77 inches of string.
a. Does she have enough string?
b. If she has extra, how much extra does she have?
c. If that isn't enough string, how many extra inches does she need to wrap the box and tie the knot?

| Diagram | Solution |  |
| :---: | :---: | :---: |
| $\square$ Perimeter | Area |  |

