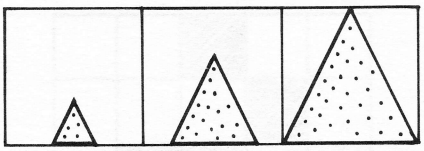
Activities with Area

Why

To provide experiences in finding area of many objects using a variety of units



Grade Level

TOOLS

Measurement Tool Kit

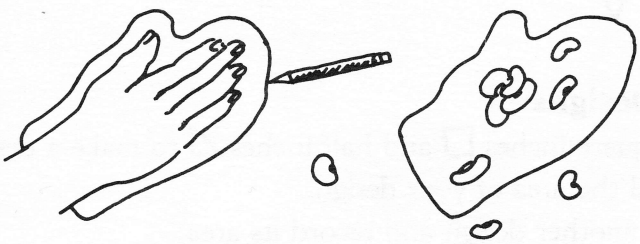
How

Circular Lids

- □ Pick a circular lid.
- □ Find some lids that are smaller.
- □ Find some lids that are larger.
- □ Put your lids in order by size.

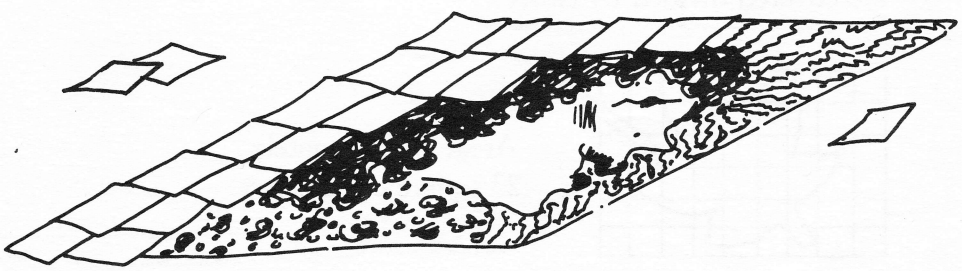
Mitten Hands

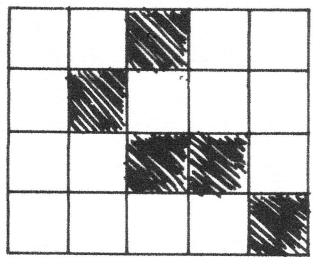
- □ Trace around your hand with your fingers together to make a shape like a mitten.
- □ Guess how many beans it will take to cover your shape. Check.
- □ Guess how many one-inch squares it will take to cover this shape. Check.



Square Inches

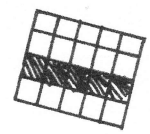
- □ The area of an object is the number of square units that cover it.
- □ First guess how many one-inch squares will cover each of the following objects: piece of paper, a record cover, a magazine, your favorite book, a record. Then check.
- □ Put these objects in order by area.

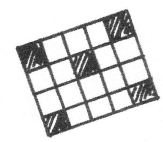


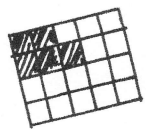


Color Design

- ☐ Color a design with any 36 squares on a 10×10 piece of graph paper.
- ☐ Make several more designs with 36 squares.
- ☐ Compare your designs with a friend.
- ☐ Remember, they all have the same area—36 square units. (For younger children, color any five squares on a 4×5 piece of graph paper.)

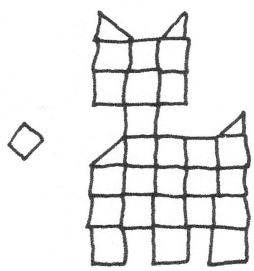






Square Centimeters

- ☐ Find five objects that are smaller in area than a square decimeter and five that are larger. A square decimeter is 10 centimeters by 10 centimeters.
- ☐ Set the objects onto centimeter graph paper to help you compare their areas.
- ☐ Do the same activity using a square foot and square inches.



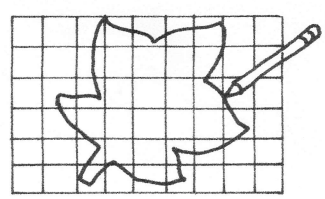
Area: 26 square units

Inch Designs

- ☐ Use square inches ☐ and half inches ◿ to make a design.
- ☐ Record the area of your design.
- ☐ Make another design and record its area.

Partial Squares

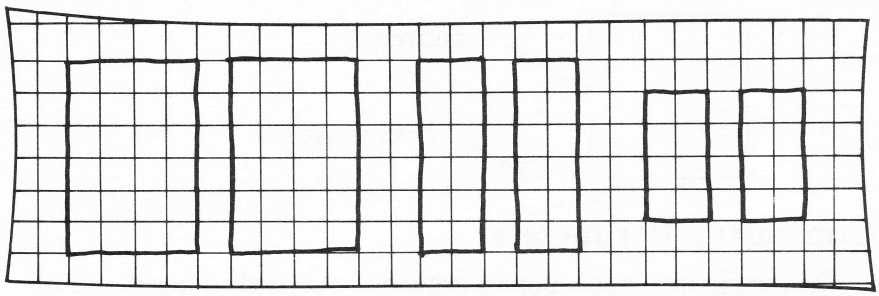
- ☐ Trace odd-shaped objects on square centimeter graph paper.
- ☐ Approximate the area of each by adding the number of full squares that are covered to the number of partial squares that are covered divided by two.



Area: approximately
23 square centimeters

Box Faces

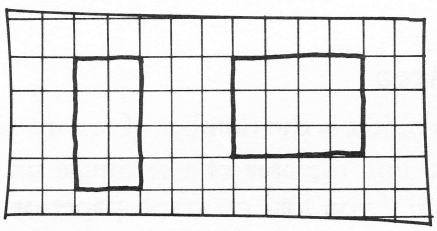
- ☐ Trace all six faces of a box on square centimeter graph paper.
- ☐ Find the area of each face and add them to find the surface area of the box.
- ☐ Do this for another box.



Centimeter paper

Expanded Rectangles

- ☐ Draw a 3 cm×2 cm rectangle.
- ☐ What happens to the area when you double the length?
- ☐ Double the width?
- ☐ Double both the length and the width?
- ☐ Answer these questions for a 5×4 rectangle and a 6×6 square.

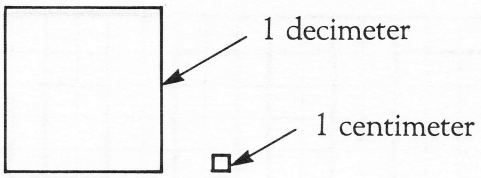


Square Meter

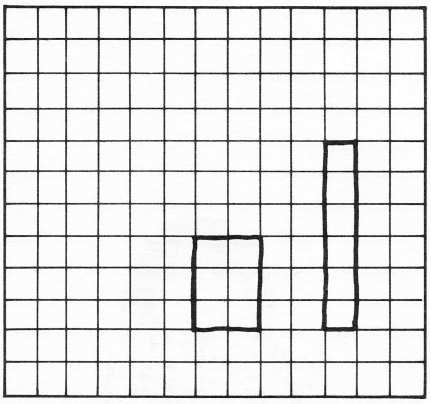
- ☐ Make a square meter. Cover it with decorated square decimeters.
- ☐ Make a square yard. Cover it with decorated square feet.

Comparing Squares

- ☐ Figure out how many square centimeters in a square decimeter, in a square meter.
- ☐ Figure out how many square inches in a square foot, in a square yard.



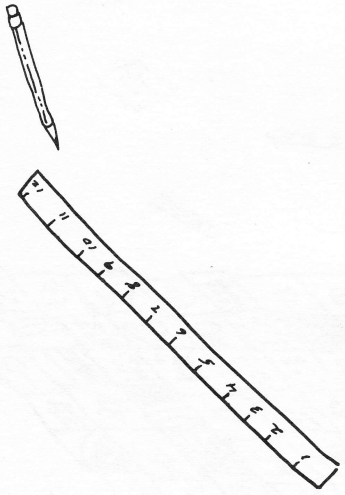
Comparing Perimeters

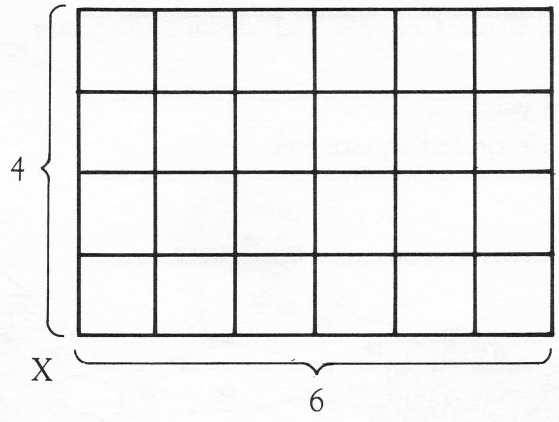


- ☐ On centimeter graph paper, draw a shape with a perimeter of fourteen centimeters.
- ☐ Find its area.
- ☐ Draw a different shape with the same perimeter.
- ☐ Does it have the same area?
- ☐ Can you find one with a different area?
- ☐ What short of shapes with a perimeter of fourteen have the largest area?
- ☐ Do this activity for a perimeter of sixteen.

Computing Area

- ☐ The area of an object is the number of square units that cover it.
- ☐ How could you find the area of a rectangle six inches long by four inches wide if you had no graph paper or square inches to use?





1 INCH Graph paper

1 CENTIMETER Graph paper