

AREA

Subject

Mathematics

Prepared By

[Instructor Name]

Grade Level

1

Overview

This lesson plan covers teaching content for;

- 1.Area of plane shapes
- 2.The idea of larger than, smaller than, largest, smallest and the same.

Objectives

- Students should be able to;
- 1.Estimate, measure (i.e., by minimizing overlaps and gaps), and describe area, through investigation using non-standard units.
 - 2.Compare two or three objects using measurable attributes (Area), and describe the objects using relative terms.

Teacher Guide

Day 1, Lesson 1- 15 Mins

- 1.Remind children that they can calculate the area of a shape by dividing it into equal squares and then counting the squares.
2. Each of these squares is called a square unit. Draw different shapes on grid or graph paper and have children count the squares to calculate the area.
- 3.Help them understand that each square in the graph paper represents one square unit, so area is described in square units. Then draw a shape on the graph paper that utilizes half squares and help children calculate the area.
- 4.Remind them that two half-square units are equal to one square unit.
- 5.Show them how to count the whole squares and then add the half-squares to the total.

Teacher Guided Practice

Day 2, Lesson 2- 15 Mins

- 1.Cut up paper shapes and find the area of each.
- 2.At first, you may want to use graph paper to draw and cut out shapes, so it is easier for your students to count square units and figure out the area.
- 3.Then draw or cut out squares and rectangles using plain paper and have your students measure the length and width.
- 4.Help your students multiply to find the area.

Day 4, Lesson 4- 15 Mins

- 1.Have your students draw rectangles with a given perimeter.
- 2.Have students draw all the rectangles they can with the same perimeter on their grid paper.
- 3.Students should also find the area and write it inside each rectangle.
- 4.Then have students cut out the rectangles and order them from smallest area to largest area and glue them on construction paper.
5. Once students finish the task, post the students' work so that students can see

Materials Required

- Paper shapes
- Graph Paper
- Square tiles

Additional Resources

- <https://www.scholastic.com/teachers/bl-perimeter/>
- <https://jr.brainpop.com/math/measuren>
- <https://educators.brainpop.com/lesson-1>
- <https://www.pinterest.com/kbreedlove1>
- <https://www.youtube.com/watch?v=Xts>
- <http://www.ashleigh-educationjourney.c>
- <http://www.edugains.ca/resourcesMath>
- <https://www.pinterest.com/pin/284430!>

Additional Notes

Objectives

Introduction/Instruction

1. Review with children that area is the measurement of the space inside of a shape.
 2. Some children get area confused with perimeter, which is the total distance around a shape.
 3. We calculate area to figure out the size of a room, how much carpet we need to cover a floor, or how much wallpaper, tile, or paint we need to cover a wall.
 4. In the early primary grades, students develop concepts about area through opportunities to cover different surfaces with a variety of non-standard units (e.g., square tiles, pattern blocks, sheets of paper).
 5. Such experiences help students understand that area can be measured by counting the number of units that cover a surface.
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Teacher Guide

Day 3, Lesson 3 – 20 Mins

1. Give students a sheet of graph paper and have them draw shapes. Remind them to use only straight lines.
 2. They may want to use rulers to help them draw. Also encourage them to use shapes with half-squares on the graph paper.
 3. Then have students swap their shapes with a partner and calculate the area by counting the squares and half-squares.
 4. Next ask students to draw a shape that is 8 square units or 10 square units and ask a partner to check their work.
 5. Can they create other shapes with the same number of square units?
 6. Encourage children to continue drawing and measuring shapes until the paper is filled.
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Teacher Guided Practice

several different examples of rectangles with the same perimeter arranged in order by area.

Day 5, Lesson 5: 20 Mins

1. Draw students' attention to covering an area in natural situations, such as
 - covering a desk or table with newspaper for painting
 - putting a tablecloth on a playhouse
 - covering a doll with a blanket
 2. Provide opportunities for students to compare areas by
 - superimposing
 - comparing different sizes of the same shape
 - comparing different shapes
 3. Ask, "How do you know that the area of this is larger/smaller."
 4. Allow students to explore covering areas with a variety of objects. Have them keep a record by drawing or writing.
 5. Discuss how objects must completely cover an area
 6. Have students compare areas using concrete materials. For example, tell students to do the following:
 - Hide a shape by covering its surface with blocks.
 - Record the number of blocks used.
 - Hide another shape using blocks. Record the number of blocks used.
 - Compare the number of blocks used to determine which area is larger."
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Objectives

6. Brainstorm other uses for area together.
7. Explain that to calculate area of a rectangle or square, you can multiply the length times the width instead of dividing the shape into equal squares and counting all the square units.
8. Go through a few examples together.

Teacher Guide

Teacher Guided Practice

Extend the activity by having them order the shapes by area from least to greatest

Assessment Activity

1. Provide three shapes labelled A, B, and C.
2. Ask students to;
 - Predict the order of the shapes from the smallest area to the largest area without covering (estimating)
 - measure to confirm their predictions.
 - Record their results
 - Write comparative sentences about the three shapes.

Assessment Activity

- 1.

Assessment Activity

- 1.

Summary

- 1.