

Algebra/Geometry Institute Summer 2003

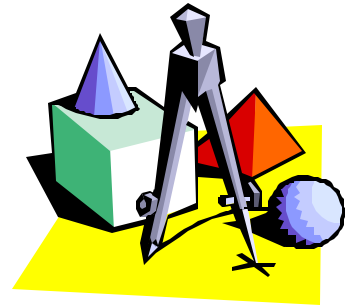
Lesson Plan 2

Faculty Name: Mary C. Brown

School: Shelby Middle School

City: Shelby, MS 38732

Grade Level: 4th



1 Teaching objective(s)

Students will find the area and perimeter of various shapes.

2 Instructional Activities

- ❖ Present the problem of the day. (See Attachment #1)
- ❖ Give the vocabulary terms. The students will define each term and place them in their mathematics notebook. (See Attachment #2)
- ❖ The teacher will introduce the lesson by giving each student a sheet of typing/butcher paper, grid paper, and washable paint.
- ❖ Have students to trace their footprints on the typing/butcher paper or butcher paper.
- ❖ Place a small amount of paint on a small paper plate for each student to use.
- ❖ Explain that students are to use their thumbprint to cover the entire inner space (area) of their footprint.
- ❖ Tell students to count the number of thumbprints it took to cover their entire footprint.
- ❖ As an alternative unit of measurement, have students trace their footprint on a sheet of grid paper and count the units to determine the area.
- ❖ Have students work in groups to chart findings. (See Attachment #3)
- ❖ Explain to the students that the number of thumbprints it took to cover the entire footprint would be the area.
- ❖ Have students count the number of thumbprints it took to go around the entire outer edge around the footprint. Explain that this is known as the perimeter.
- ❖ Make sure students record all findings. Students should recognize that the area of the foot is different from the perimeter.
- ❖ Distribute grid paper and attribute blocks to each student.
- ❖ Have students trace regular and irregular shapes such as: square, rectangle, and quadrilaterals on the grid paper and record the area and perimeter of each shape.
- ❖ Discuss findings.

3 Materials and Resources

Typing /Butcher Paper
Grid Paper
Pencil
Washable Paint (assorted colors)
Paper Plate (small)
Notebook
Dryboard/Markers

References: Textbook - Houghton Mifflin Mathematics. Houghton Mifflin Company, 2002. Pages 486-493. 4th Grade

4 Assessment

Teacher Observation/Questioning
The students will complete a quiz on finding area and perimeter using grid paper.

Attachment #1

Problem of the Day

One half of a collection of 104 insects were moths, and one fourth were dragonflies.

How many insects were not moths or dragonflies? (26 insects)

Attachment # 2

Vocabulary

1. Area
2. Perimeter
3. Rectangle
4. Square

Attachment #3

Finding Area and Perimeter

	Area	Perimeter	Comments	
Foot Print				
Thumbprint				
Grid				