



ACTIVITY

- RECTANGLES, SQUARES -



Educational Goals

- ❖ Highlight the playful potential of mathematics
- ❖ Experiment in practical terms the greatest common divisor principle

Key Features of the Targeted Competency

- ❖ To mobilize mathematical concepts and processes appropriate to the situation
- ❖ To apply mathematical processes appropriate to the situation
- ❖ To justify actions or statements by referring to mathematical concepts and processes

Concepts Used

- ❖ Greatest common divisor
- ❖ Division
- ❖ Area

Materials

- ❖ Graph paper or a copy of the grid in the appendix
- ❖ Explanation Sheet
- ❖ Pencils
- ❖ Paper
- ❖ Scissors

Targeted Academic Levels
Grades 3 to 6

Mathematical Field Concerned



Suggested Teaching Formula



Time Required
Approximately 40 minutes



SUGGESTED PROCESS



Step 1: Introduction (10 minutes)

Explain the activity to the students by doing the example in the “Rectangles, Squares” Explanation Sheet. Draw the cuts on graph paper or on a grid, following the steps in the example, then cut each square to verify the answer with the students.

Step 2: Creations (30 minutes)

Distribute a 20 by 10 sheet of graph paper or the first grid in the appendix. Ask the students to cut like in the example, then observe the result. Question the students on the difference between these numbers and the previous ones. Get them to observe that 10 divides 20 in two and that it is what they just did by cutting.

Come back to the first example and ask the students why they get 1 by 1 with the example. Get them to notice that these numbers are prime numbers.

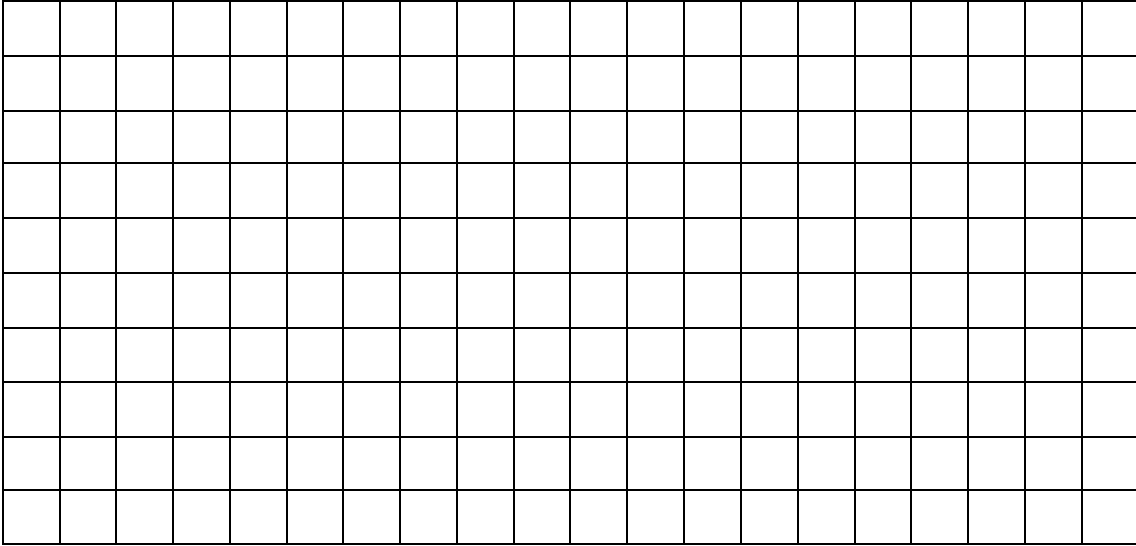
Distribute a 24 by 15 sheet of graph paper or the second grid in the appendix. Ask the students to cut like in the example, then observe the result. Get them to realize that it is the greatest common divisor.

Step 3: Review

Come back over what has been seen. You may refer to the “Rectangles, Squares” Explanation Sheet for help.

Appendix:

20 x 10 grid



24 x 15 grid

