

## Lesson: Geometrical Form of Division

Sequence: After student is proficient with division using stamp game.

Materials: Black, green, blue, red colored pencils; graph paper of appropriate size grid

### Presentation 1:

1. Tell students you will show them the Geometrical Form of Division.
2. Ask students to follow along with you. This is a lesson/activity that they must do in order to learn it. Teacher must do each step carefully and in full sight of each student. (I do this by holding clipboard with graph paper in front of me and giving the presentation upside down so students see the activity from their perspective.)
3. Begin by writing problem in upper left corner of paper **outside of the grid area**. Wait for students to finish writing problem.  $4362 \div 3$  (write in long form.)
4. Ask how many times 3 can go into 4? "1"
5. Begin in upper left corner of grid area. Color in one row of 3 in green.
6. Mark number of rows above the thousands place in answer area.
7. Ask how many are left over? "1"
8. Ask them what they would do if it were the stamp game? "Trade it in for 10 hundreds."
9. Ask how many rows of 3 can you make with 13? "4"
10. Color in 4 rows of 3 in red (\*\*see picture for where to start.\*\*)
11. Write in number of rows (4) above the hundreds place in the answer area.
12. Ask how many are left over? "1"
13. Ask what to do? "Trade in for 10 tens."
14. Ask how many rows of 3 can you make with 16? "5"
15. Color in 5 rows of three in blue (\*\* see picture \*\*)
16. Write in number of rows (5) above the tens place in the answer area.
17. Ask how many are left over? "1"
18. Trade in for 10 ones.
19. Ask how many rows of 3 can you make with 12? "4 with nothing left over"
20. Color in 4 rows of 3 in green.
21. Write in number of rows (4) in answer area above the units place.

1,454

$$\begin{array}{r} 3 \overline{) 4,362} \\ \underline{-3} \phantom{00} \\ 13 \phantom{00} \\ \underline{-12} \phantom{00} \\ 16 \phantom{00} \\ \underline{-15} \phantom{00} \\ 12 \phantom{00} \\ \underline{-12} \phantom{00} \\ 0 \end{array}$$

