FACT STRATEGY POSTERS

Division

Originally developed by math interventionists Laurie Kilts and Kim Hornbeck, this set of posters uses words, numbers, and pictures to illustrate six different methods for solving a division combination without a remainder. While the examples involve two-digit dividends less than 40, some of the strategies can be applied to solving larger combinations. All of the strategies are introduced and reviewed in Bridges and Number Corner, Grades 3 and 4.

Grade Level Suggestions	
Grades 3 & 4 Display each poster after you have introduced or reviewed the strategy, and leave it up for students' reference through the school year. Review and discuss the strategies in your growing collection periodically through the year.	**Grade 5** Display and review the entire collection early in the school year, and leave it up through the year for students' reference.

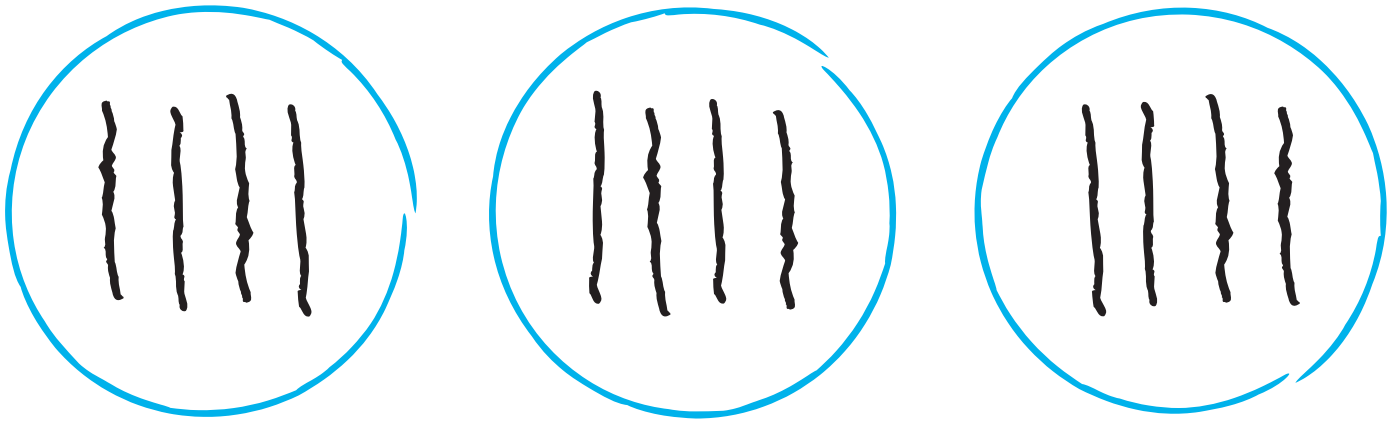
These posters are set up for printing on letter size paper; however, we recommend that you enlarge them onto 11 × 17 if possible, or have a print shop make them even larger. They can then be posted in your classroom for student reference and discussion.

The MATH LEARNING CENTER

Share Fairly

12 ÷ 3 = ?

If we divide 12 tally marks fairly into 3 loops, how many will there be in each loop?

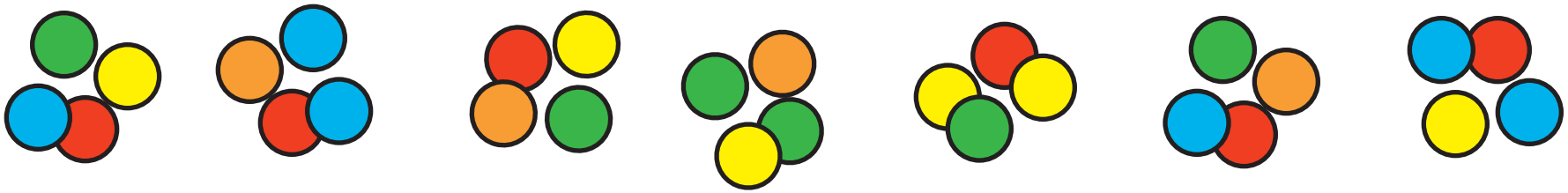


Each loop got 4 tally marks, so 12 ÷ 3 = 4.

Make Equal Groups

28 ÷ 4 = ?

How many equal groups of 4 can we make with 28 counters?



We can make 7 groups of 4, so 28 ÷ 4 = 7.

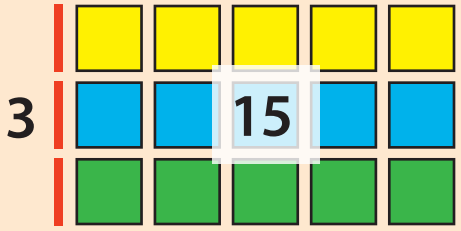
Build a Tile Array

15 ÷ 3 = ?

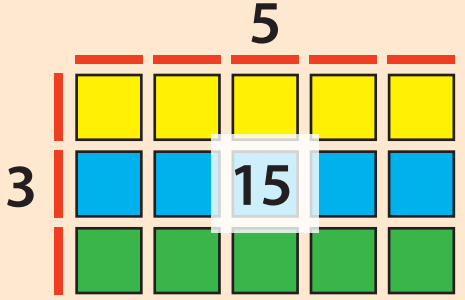
If we arrange 15 tiles to form an array with 3 rows, how many will there be in each row?

Use red linear pieces to show the divisor.

Divide the dividend into equal rows.



Use red linear pieces to show the quotient along the top of the array.



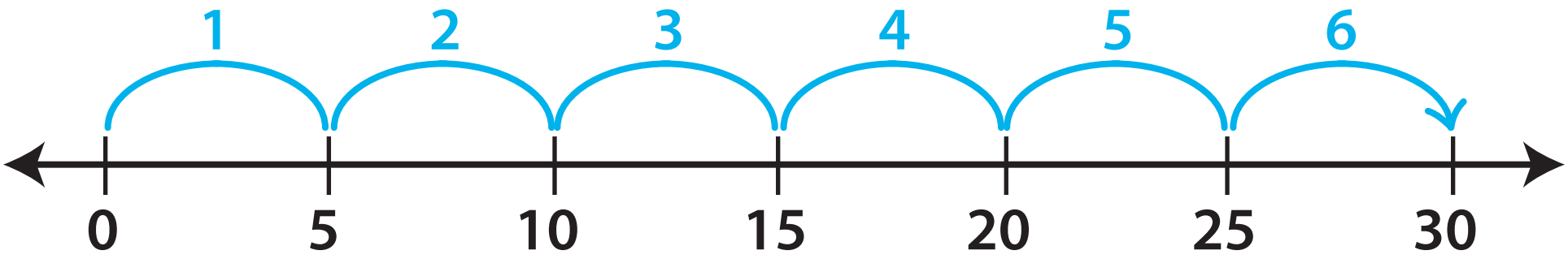
$$3\overline{)15}\quad 5$$

There are 5 in each row, so 15 ÷ 3 = 5.

Use Skip-Counting

30 ÷ 5 = ?

How many times do we have to count by 5 to reach 30?



If you skip-count by 5 six times, you get to 30, so 30 ÷ 5 = 6.

Think Multiplication

$32 \div 8 = ?$

$\square \times 8 = 32$

I know that 4×8 is 32, so $32 \div 8 = 4$.

Break It Apart

$36 \div 3 = ?$

Break the dividend apart by place value.
Divide each part and add the quotients.

$$36 = 30 + 6$$

$$30 \div 3 = 10 \text{ and } 6 \div 3 = 2$$

$$10 + 2 = 12 \text{ so } 36 \div 3 = 12$$

When we solve division combinations this way,
we're using the *distributive property.*