

FAMILY MATH

Conceptual Understanding of Multiplication

Dear Family,

Your student is making sense of multiplication by connecting it to addition. Instead of repeatedly adding the same number, they recognize that multiplying can be more efficient. They create representations of multiplication in equal groups or arrays by using cubes or drawing pictures. Then they write multiplication equations to match. For now, the factors are limited to 2, 3, 4, 5, and 10 as your student builds their understanding of multiplication.

Key Terms and Symbols

factor

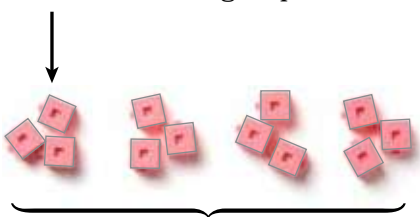
multiplication

multiplication symbol \times

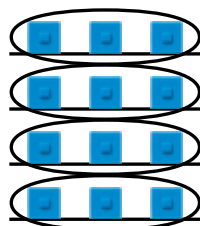
multiply

product

Number in each group: 3



Number of groups: 4

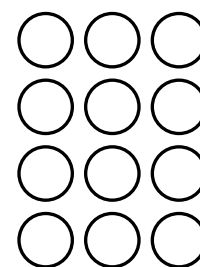


$$3 + 3 + 3 + 3 = 12$$

$$4 \text{ threes} = 12$$

$$4 \times 3 = 12$$

Draw an array to show 4 rows of 3.



$$4 \times 3 = 12$$

factor

factor

product

At-Home Activities

How Can You Make Equal Groups?

Gather groups of everyday objects from around your home such as toy cars, crackers, or beads. Together with your student, arrange the objects into equal groups or arrays. Ask them to write or say a multiplication equation to represent the groups of objects. Encourage skip-counting to figure out the product.

Equal Groups and Arrays at the Grocery Store

Look for items packaged in equal groups and arrays, such as eggs, hamburger buns, or toilet paper. Discuss with your student the number of groups and the number in each group for each situation. Then have them use multiplication to find the total in each package.