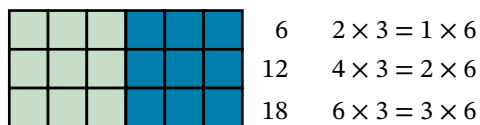


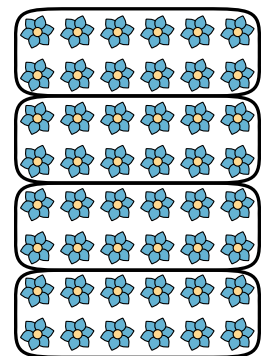
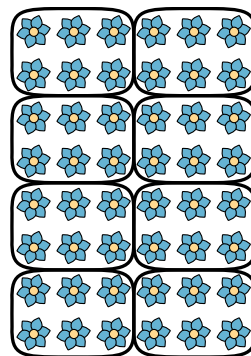
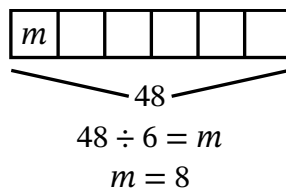
Multiplication and Division Concepts with an Emphasis on Units of 6 and 8

Dear Family,

Your student is continuing to practice multiplication and division. They use their knowledge of multiplication and division with units of 3 and 4 to help them solve problems with units of 6 and 8. Familiar strategies, such as the break apart and distribute strategy, and familiar representations, such as arrays, equal groups, and tape diagrams, support your student as they multiply with larger factors. Your student is beginning to use a letter to represent an unknown value in models and equations.



Thinking about threes can help when multiplying and dividing with sixes because 6 is 2 groups of 3.



$$\begin{array}{r} \underline{8} \text{ groups of } (\underline{2} \times \underline{3}) \\ \underline{8} \times (\underline{2} \times \underline{3}) \\ \underline{8} \times \underline{6} \end{array}$$

$$\begin{array}{r} \underline{4} \text{ groups of } (\underline{2} \times \underline{6}) \\ \underline{4} \times (\underline{2} \times \underline{6}) \\ \underline{4} \times \underline{12} \end{array}$$

Letters can represent unknown values. It is useful to choose a letter related to the problem. For example, m could represent money.

Arrays can be broken into equal groups in different ways when they are being used to solve more challenging problems.

At-Home Activities

How Much and How Many with 6 and 8

With your student, look for opportunities to solve real-world multiplication and division problems with units of 6 and 8. For example, if a box of granola bars holds 6 bars, ask your student how many bars are in 5 boxes. If it costs \$8 for a movie ticket, ask your student how many tickets you can buy with \$24. Encourage them to use strategies such as skip-counting, drawing an array, and breaking apart the problem into more familiar factors.

Multiplication to Keep Fit

Do a fun workout with your student. Choose a few exercises, such as jumping jacks, sit-ups, push-ups, or lunges, that you can do together. Do each exercise 6 or 8 times to complete 1 set. Do 2 to 5 sets of the exercises with your student, keeping track of how many you complete. During your cooldown, ask your student questions about the number of exercises. Encourage them to use multiplication and division to determine the answers.

- “How many total sit-ups did we do? What can we multiply to help us figure it out?”
- “How many sit-ups and jumping jacks did we do? Tell me what equations help you find the total.”
- “We did 48 lunges, and there were 8 in each set. How many sets of lunges did we do?”