Divide Four-Digit Numbers

Dear Family,

This week your child is learning to divide four-digit numbers by one-digit numbers.

Your child is learning to divide a four-digit number by a one-digit number.

One way your child can solve a division problem is to find **partial quotients**. With this strategy, your child divides by breaking the dividend into parts.

Below shows one way to divide 2,113 by 4 by finding partial quotients.

```
        3
       25
      500
  4)2,113  ←— How many groups of 4 in 2,000? 500
  − 2,000  ←— Subtract 500 groups of 4.
      113  ←— How many groups of 4 in 100? 25
    − 100  ←— Subtract 25 groups of 4.
       13  ←— How many groups of 4 in 13? 3
     − 12  ←— Subtract 3 groups of 4.
        1
```

The partial quotients are **500**, **25**, and **3**. The remainder is **1**.

Altogether, there are **500** + **25** + **3**, or **528**, groups of 4 in 2,113, with 1 left over.

$$2{,}113 \div 4 = \textbf{528 R 1}$$

Invite your child to share what he or she knows about dividing four-digit numbers by doing the following activity together.

ACTIVITY DIVIDING FOUR-DIGIT NUMBERS

Do this activity with your child to divide four-digit numbers.

Materials 1 number cube (or dot cube)

- Have your child roll a number cube five times to make a division problem with a four-digit number and a one-digit number.

- The first four rolls form the four-digit number in the order of the rolls. The first roll is the thousands digit. The last roll is the divisor.

    Example: Your child rolls a 4, 2, 6, 1, and 3.
    The division problem is 4,261 ÷ 3.

- Have your child find the quotient. There may or may not be a remainder.

    Example: 4,261 ÷ 3 = 1,420 R 1

- Then you multiply to check your child's answer.

    Example: 3 × 1,420 = 4,260
    4,260 + 1 = 4,261
    Your child's answer is correct!

- Switch roles and repeat the activity with you doing the division and your child using multiplication to check the answer.

- The player with the greater quotient wins the round.

- Play three rounds.