PSS: Use a Table

When you solve a problem using division, there is often a remainder. When there is a remainder, you must decide what it means for the problem. You need to determine whether the solution to the problem is:

- The quotient without remainder
- The next whole number greater than the quotient
- The next whole number less than the quotient or
- The remainder

Example:

The sixth-grade class ordered 185 doughnuts for a class picnic. The "Dunkin Donuts" packed the order in boxes of 12 doughnuts. How many boxes were needed?

STEP 1: Think what you know and what you are asked to find.

You know the number of doughnuts ordered and the number that was put in each box.
You are asked to find the number of boxes that was needed.

STEP 2: Decide on a plan to solve.

Since the same number of doughnuts was put into each box, use division to solve the problem.
Examine the quotient and remainder and decide how they relate to the problem.

STEP 3: Carry on your plan. $\dfrac{15r5}{12)\overline{185}}$

The quotient 15 means that 15 boxes were filled. The remainder means that there were 5 doughnuts left after the last box was packed.

So, the Dunkin Donuts needed 15 + 1, or 16 boxes in all, to pack the 185 doughnuts.

Grade 6

Example:

A- Rana has 126 colored chalks that she needs to place in boxes. Rana can place 12 chalks in each box. How many boxes does she need?

Rana needs to divide the number of chalks by 12 which is the capacity of each box.

$$126 \div 12 =$$

$$12 \overline{)126} \quad 10 \text{ r } 2$$

$$\underline{-10}$$

$$26$$

$$\underline{-24}$$

$$2$$

She will pack them in 10 boxes, and the remaining is 2 chalks.