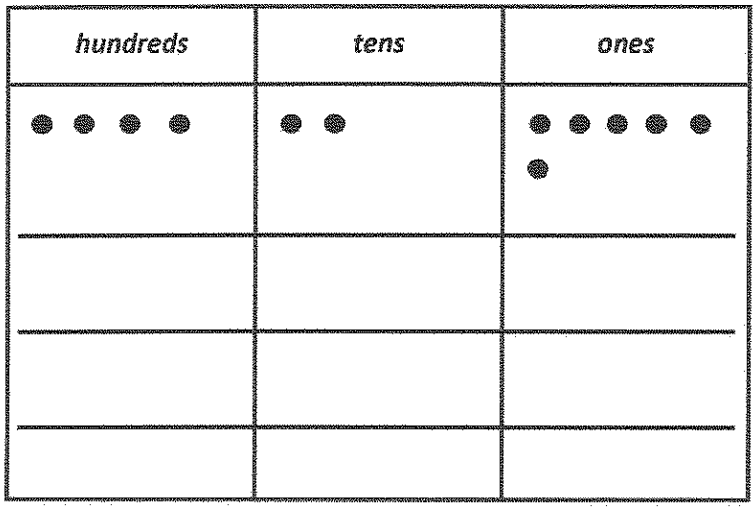
G4-M3-Lesson 27

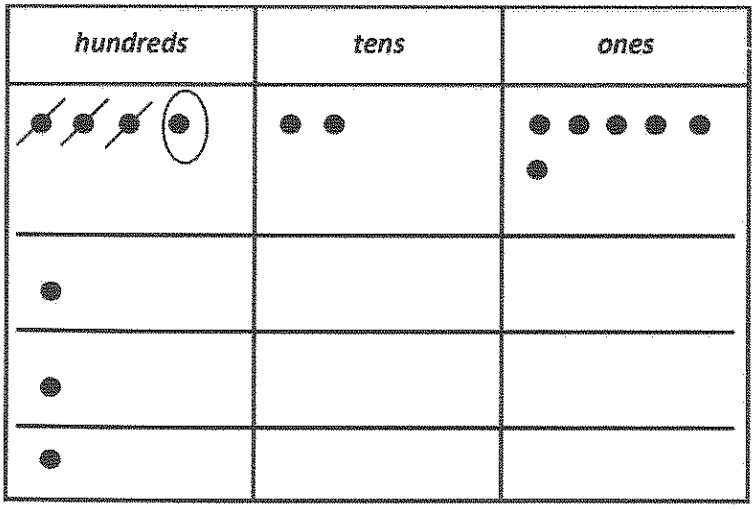
Divide. Model using place value disks, and record using the algorithm.

$426 \div 3$



I represent 426 as 4 hundreds 2 tens 6 ones.

I make space on the chart to distribute the disks into 3 equal groups.



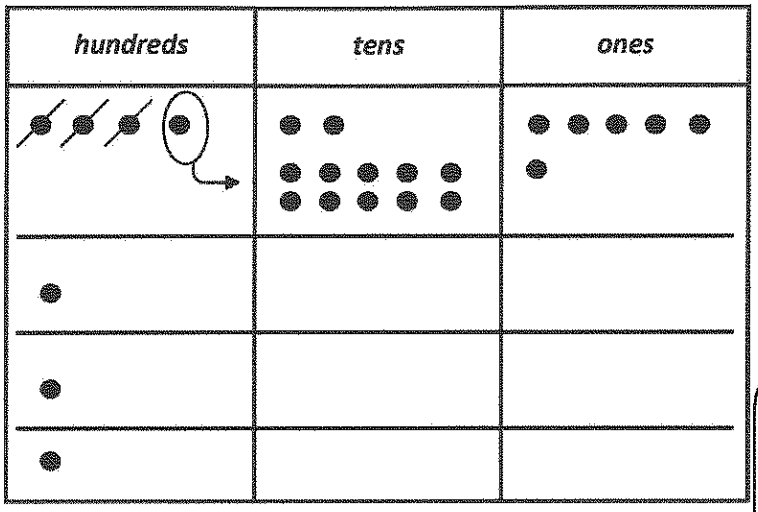
I remember from Lesson 16 to divide starting in the largest unit.

4 hundreds divided by 3 is 1 hundred.

$$\begin{array}{r} 1 \\ 3\overline{)\,4\;2\;6} \\ -\;3 \\ \hline 1 \end{array}$$

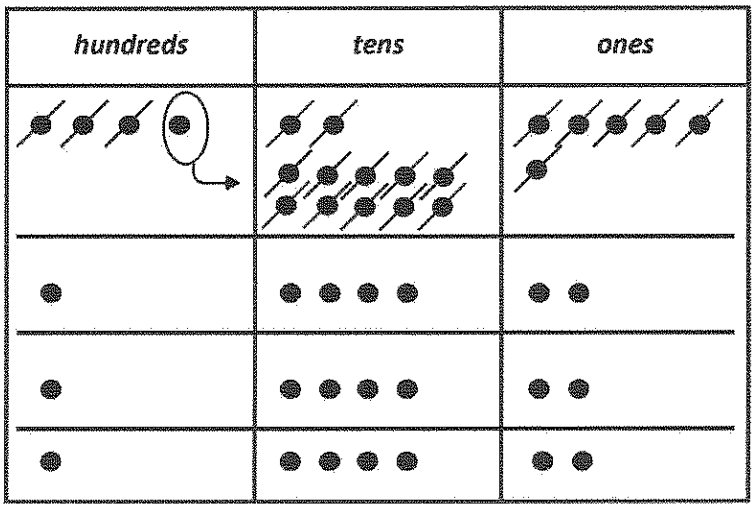
1 hundred in each group times 3 groups is 3 hundreds.

We started with 4 hundreds and evenly divided 3 hundreds. 1 hundred remains, which I've circled.



$$\begin{array}{r} 1 \\ 3 \overline{)\,4\;2\;6} \\ -\;3 \\ \hline 1\;2 \end{array}$$

I remember from Lesson 17 that when there are remaining units that can't be divided, I decompose them as 10 of the next smallest unit. So 1 hundred is decomposed as 10 tens. Now there are 12 tens to divide.



I continue to distribute tens and ones, and I record each step of the algorithm.

$$\begin{array}{r} 1\;4\;2 \\ 3 \overline{)\,4\;2\;6} \\ -\;3 \\ \hline 1\;2 \\ -\;1\;2 \\ \hline 0\;6 \\ -\;\;6 \\ \hline 0 \end{array}$$

1 hundred 4 tens 2 ones

The value in each group equals the quotient.