Hundreds Tens and Ones

Long Division

Why do we "bring down" a number when dividing?

What does that mean?

To see, first of all look at

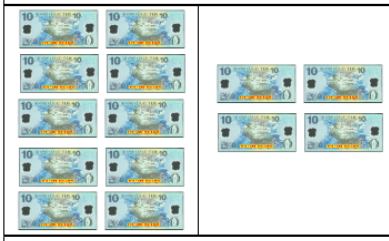
Change

What does $142 look like?

It could look like this:

1 HUNDREDS	4 TENS	2 ONES
		
1	4	2

Or it could look like this:

14 TENS	2 ONES
	
1 4	2

Or it could even look like this:

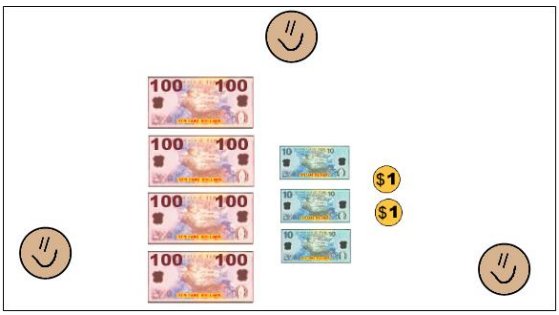
142 ONES

1 4 2

S

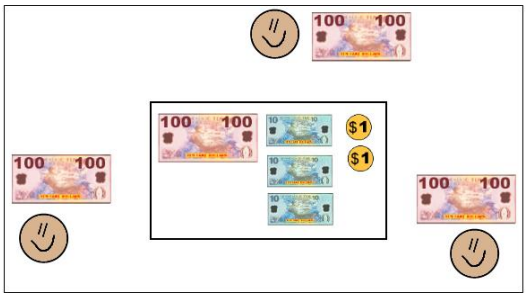
Dividing

Let's divide $432 by 3 people:



Step 1:

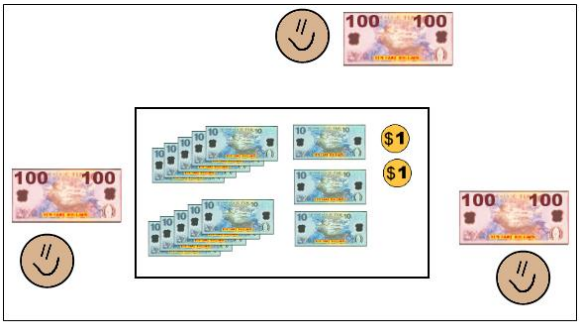
Can we divide 3's into 4? That is, can we take 3 off 4?
Answer: Yes. So let's do it!



$$\begin{array}{r} 1 \\ 3\overline{)\,4\,3\,2} \\ \underline{1} \end{array}$$

So far we have divided just the 4 hundreds.
Each person took one $100 bill. So 3 of them came off the pile.
The division is shown above. We take 3 off 4 leaving 1.
There was "1 three in four" with 1 remainder.

Step 2:
We can't divide the $100 bill by 3 without tearing it!
So change it down to ten $10 bills.
That's a total of 13 lots of $10 bills all in all.
Let's divide that by 3:



$$\begin{array}{r} 1 \\ 3\overline{)\,4\,3\,2} \\ \underline{1\,3} \end{array}$$

This is our "bring down (the 3)" step.
See what it does?

Now we are dealing with tens
And the answer will go in the tens column, not the hundreds.
So let's divide out those 13 tens:

Step 3:
Divide by subtracting.
13 - 3 - 3 - 3 - 3 = 1
There are 4 three's in 13

and so on it goes...