Lesson 1

Intro

Dividing a large number can be daunting, but with the right trick, it can be a breeze!  
Let’s briefly examine a useful mathematical principle that will help us.

Place Value

First, let’s take a quick look at how large numbers are arranged by single digit numbers.  
These digits are placed by multiples of 10’s, since we use a base 10 number system.

Place Value Distribute

Now with that in mind, we can split a large number up by this principle.  
Splitting up a number to be added later is known as the distributive property.  
Pay close attention to how the distributive property works in this example!

End

Let’s go ahead and put this into practice once we face the first mega blob!

Lesson 2

Intro

This time around, we will be dividing with double-digit numbers.  
It would be too troublesome to deal with these blobs using our current technique.  
Fortunately, we have one more trick our sleeves!

Area Model

Since division is the inverse of multiplication, you can visualize the equation as the dimensions of an area.  
In this case, the answer to the equation is the width of the area.

Area Model Distribute

We can then use this model to partially solve the equation with smaller numbers.  
Observe how the area is being split into two.  
Adding the two split values will then give you the whole solution.

End

Now why don’t we try this new technique out with the next mega blob!

Level 1 Tutorial

Intro  
Look out! Two blobs have appeared.  
In order to attack the mega blob, we must merge all the blobs into one golden blob.  
That means finding the quotient of the division between the two present numbers.  
Those numbers don’t look that scary. We can directly divide those numbers.  
(show drag)

Drag Instruct  
In order to merge the two blobs, simply drag one to another like so.

Op Instruct  
Now you must solve the operation by typing in the number via the numpad.  
You can also use the keyboard to enter the numbers.  
Once you feel confident with your answer, press the ENTER button on the numpad (or your keyboard).

Attack Success  
Excellent! Our attack on the mega blob was a success!

Boss Health  
This is the representation of the mega blob’s health.  
As you can see, it has been reduced.  
Once it’s empty, the mega blob will be defeated.

Split Instruct  
Now we are dealing with a much larger blob!  
Let’s split the blob up into two to make our life easier.  
Press the sparkly blob as shown to proceed.

Split Op  
Here you can see a representation of how the blob is going to be split.  
We will be splitting the blob by transferring its digits to a new blob.  
Simply click on any of the digits to transfer them.  
Once you are happy with the new split numbers, press the SPLIT button.  
Remember, both new numbers must be wholly divisible for the split to succeed!

Split Op Success  
Nicely done! The blobs have now been split into two smaller numbers.  
You can split the numbers further if you want, but there’s a limit!  
Once you have solved all the blobs, you can merge them into one golden blob for an attack.  
Good luck!

Level 3 Tutorial

Intro  
Watch out! These blobs are not to be trifled with!

Split Instruct  
Just as you have done many times before, go ahead a press the sparkly blob.

Split Op  
Here we are going to reduce the blob’s large number by multiply the divisor for a certain amount.  
First you must specify the number to multiply for the divisor. Simply type in the number, and press ENTER.

Split Op Next  
Now you must type in the correct number that multiplies the two numbers.  
Once you press ENTER, you’ll see that number subtracted from the dividend blob.  
If the resulting value is less than zero, then try again with a smaller multiplication number!

Split Op Success  
Good! The blob’s value has been reduced, and a partial quotient blob has appeared.  
Splitting up large numbers this way makes it easier to deal with two or more-digit divisors!  
I’ve said all that I can to help you, now go forth and defeat the rest of these mega blobs!