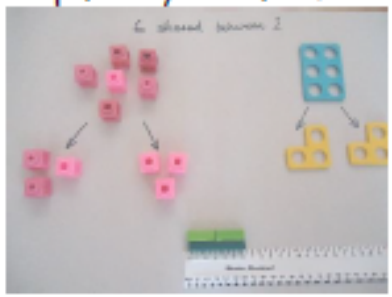
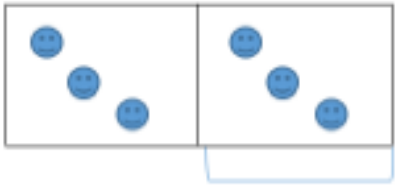
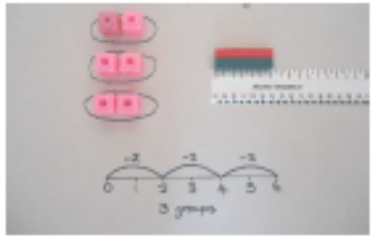
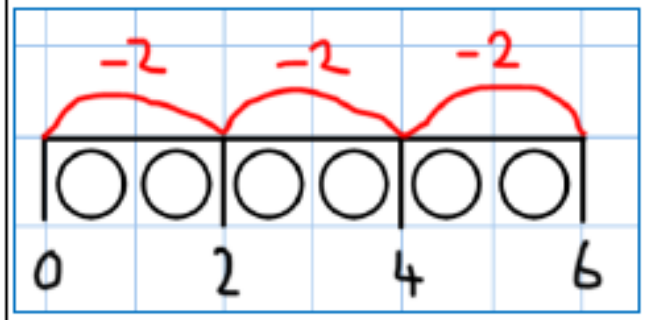
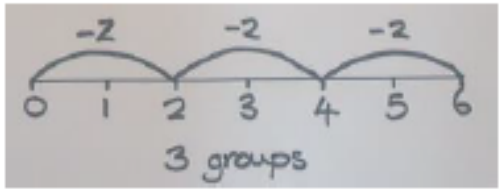
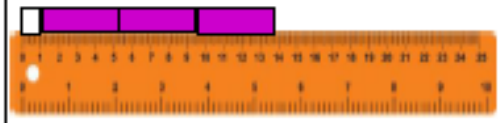
Division-

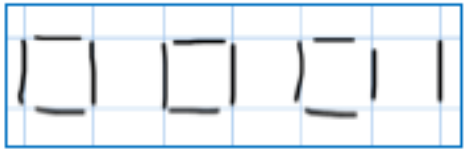
Key language which should be used: share, group, divide, divided by, half, 'is equal to' 'is the same as'

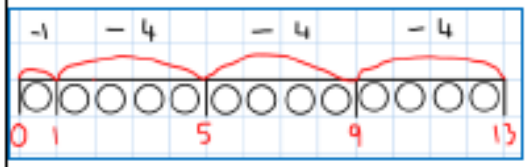
Concrete	Pictorial	Abstract
6 shared between 2 (other concrete objects can also be used e.g. children and hoops, teddy bears, cakes and plates) 	 This can also be done in a bar so all 4 operations have a similar structure: 	6 ÷ 2 = 3 What's the calculation? 3 | 3
Understand division as repeated grouping and subtracting 6 ÷ 2 		Abstract number line 
2d ÷ 1d with remainders 13 ÷ 4 = 3 remainder 1	Children to have chance to represent the resources they use in a pictorial way e.g. see below:	13 ÷ 4 = 3 remainder 1 Children to count their times tables facts in their heads

Use of lollipop sticks to form wholes

Use of Cuisenaire rods and rulers (using repeated subtraction)

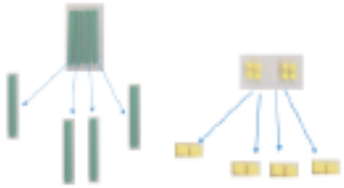






2d divided by 1d using base 10 (no remainders) SHARING

48 ÷ 4 = 12



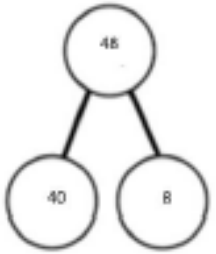
Start with the tens.

Children to represent the base 10 and sharing pictorially.

48 ÷ 4

4 tens ÷ 4 = 1 ten

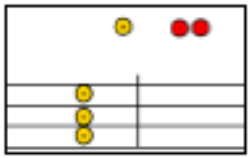
8 ones ÷ 4 = 2 ones



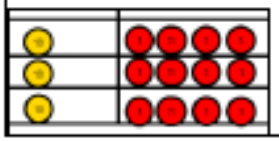
10 + 2 = 12

Sharing using place value counters.

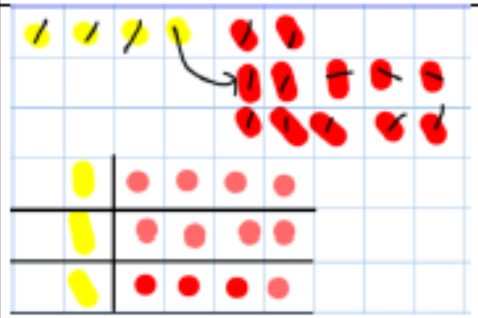
42 ÷ 3= 14



1. Make 42. Share the 4 tens between 3. Can we make an exchange with the extra 10?



Exchange the ten for 10 ones and share out 12 ones



42 ÷ 3

42 = 30 + 12

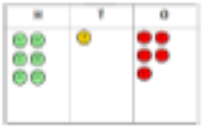
30 ÷ 3 = 10

12 ÷ 3 = 4

10 + 4 = 14

Use of the 'bus stop method' using grouping and counters. Key language for grouping- how many groups of X can we make with X hundreds'- *this can also be done using sharing!*

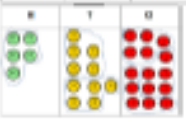
615 ÷ 5



Step 1: make 615

Step 2: Circle your groups of 5

Step 3: Exchange 1H for 10T and circle groups of 5



Step 4: exchange 1T for 10ones and circles groups of 5

This can easily be represented pictorially, till the children no longer to do it.

It can also be done to decimal places if you have a remainder!

$$5\overline{)615}\quad 123$$

Fluency variation, different ways to ask children to solve 615 ÷ 5:

Using the part whole model below, how can you divide 615 by 5 without using the 'bus stop' method?

I have £615 and share it equally between 5 bank accounts. How much will be in each account?

615 pupils need to be put into 5 groups. How many will be in each group?

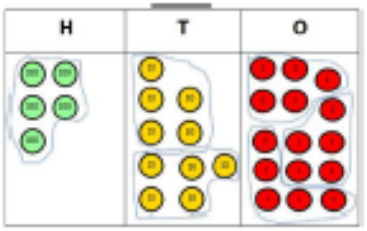
$5\overline{)615}$

615 ÷ 5 =

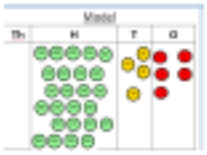
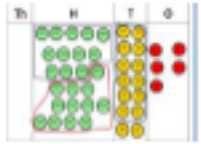
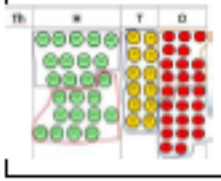
☐ = 615 ÷ 5

How many 5's go into 615?

What's the calculation? What's the answer?



Long division

Concrete	Pictorial	Abstract
  2544 ÷ 12 How many groups of 12 thousands do we have? None	Children to represent the counters, pictorially and record the subtractions beneath.	$\begin{array}{r} 0 \\ 12\overline{)2544} \end{array}$ Step one- exchange 2 thousand for 20 hundreds so we now have 25 hundreds.
 Exchange 2 thousand for 20 hundreds.		$\begin{array}{r} 02 \\ 12\overline{)2544} \\ \underline{24} \\ 1 \end{array}$ Step two- How many groups of 12 can I make with 25 hundreds? The 24 shows the hundreds we have grouped. The one is how many hundreds we have left.
 $\begin{array}{r} 02 \\ 12\overline{)2544} \\ \underline{24} \\ 1 \end{array}$ How many groups of 12 are in 25 hundreds? 2 groups. Circle them. We have grouped 24 hundreds so can take them off and we are left with one.		$\begin{array}{r} 021 \\ 12\overline{)2544} \\ \underline{24} \\ 14 \\ \underline{12} \\ 2 \end{array}$ Exchange the one hundred for 10 tens. How many groups of 12 can I make with 14 tens? The 14 shows how many tens I have, the 12 is how many I grouped and the 2 is how many tens I have left.
 $\begin{array}{r} 021 \\ 12\overline{)2544} \\ \underline{24} \\ 14 \\ \underline{12} \\ 2 \end{array}$ Exchange the one hundred for ten tens so now we have 14 tens. How many groups of 12 are in 14? 1 remainder 2.		
 Exchange the two tens for twenty ones so now we have 24 ones. How many groups of 12 are in 24? 2		$\begin{array}{r} 0212 \\ 12\overline{)2544} \\ \underline{24} \\ 14 \\ \underline{12} \\ 24 \\ \underline{24} \\ 0 \end{array}$ Exchange the 2 tens for 20 ones. The 24 is how many ones I have grouped and the 0 is what I have left.