Division

Nov 15 - 09:58

<u>Early Division</u>

Practical activities

Understanding language 'grouping' and 'sharing'

Jan 30-05:05

15 ÷ 3 =

can mean 15 shared between 3 - (sharing)

or

How many lots of 3 are there in 15? - (grouping)

Using knowledge of times tables

Use a number line (grouping):

0　　3　　6　　9　　12　　15

15 ÷ 3 =

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Early Chunking- 'repeated subraction'

72 ÷ 5 =
```
    72
 -  50      10 x 5
    22
```
```
    72
 -  50      10 x 5
    22
 -  20       4 x 5
     2
```
How many are left? 2

Count up the lots of 5   14
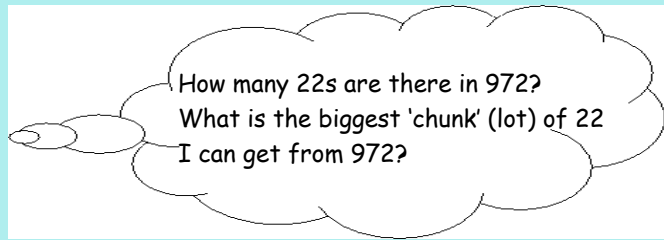
The answer is 14 remainder 2

72 ÷ 5 = 14 r 2

How many lots of five are there in 72?
What do I know from my 5 times table?
I know 10 lots of 5 are 50, so I can take off 10 lots of 5:

How many lots of 5 are there in 22?
I know 4 lots of 5 are 20, so I can take off 4 lots of 5.

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972 ÷ 22 =

```
        44 r 4
    22⟌972
        880      (40 x 22)
        ───
         92
         88      (4 x 22)
         ──
          4    the remainder
```

How many 22s are there in 972?
What is the biggest 'chunk' (lot) of 22
I can get from 972?

<u>Chunking using larger numbers (long division)</u>

```
         44 r 4
    22⟌972
        880    40 x 22    (10 x 22 = 220. So 4 lots of 220=880)
        ───
         92
         88    4 x 22 (4 x 22 = 88)
         ──
          4    (remainder)
count up the 'chunks' or multiples  of 22
```

The answer is 27

972 ÷ 36 = 27

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432 school children are going on an outing. If each bus takes 15 passengers, how many buses will be needed?

```
    432
   -300    (20 buses x 15)
   ────
    132
   - 90    (6 buses x15)
   ────
     42
   - 30    (2 buses x 15)
   ────
     12    (people left)
```
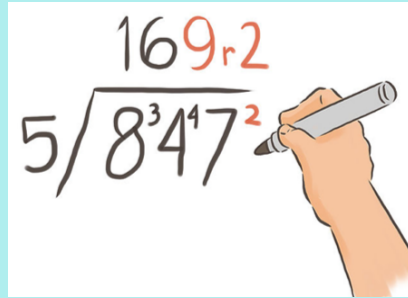
<u>Applying to worded problems</u>

So we need 29 buses or 28 buses and some cars!

Short Division

'Short' division of HTU ÷ U can be introduced as an alternative, more compact recording. No chunking is involved since the links are to partitioning, not repeated subtraction.

Remember the rule: When you say no..... put a zero.

Show example: 625 ÷ 3 =

Nov 12-13:53

Long Division

Nov 18-10:15