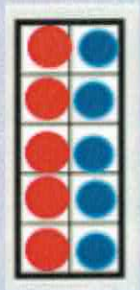
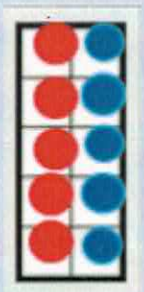
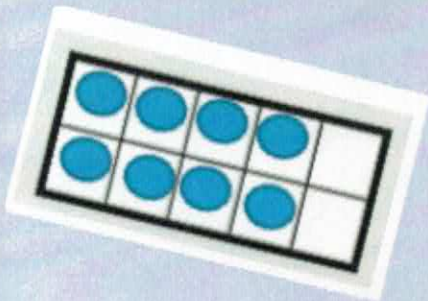
KS2 Maths Workshop

Thursday 30th January 2020

Miss Taylor







Aims for the Workshop:

- To gain an understanding of the children's prior learning
- To look at some of the strategies used in school for place value, addition and subtraction and time tables
- To consider ways you can support your children at home.

By the end of Key Stage 1:

We would expect the children to be able to recall:

-Addition and subtraction facts to 20

-Multiplication and division facts 2, 5 and 10 x tables

-Multiplication facts for 3 x tables

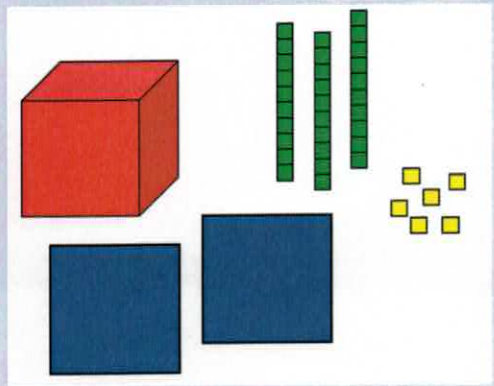
-Number of minutes in an hour; number of hours in a day

-Coin recognition up to £2

-Doubles to 20

Number and Place Value

Year 3.4 Grouping thousands, hundreds, tens and ones



What number have I built?

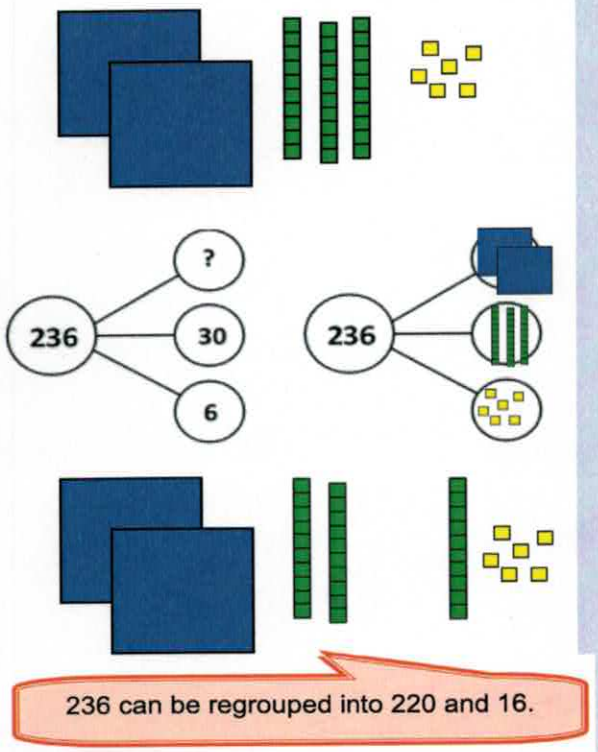
I can see one thousand, two hundreds, three tens and six ones.
1000 + 200 + 30 + 6
It is thirty-six more than one thousand and two hundred.

Place Value Questions:

1. Show the value of 5 in each of these numbers. Explain how you know. 5,462, 345, 652, 7,523

2. Create 5 four digit numbers where the tens number is 2 and the digits add up to 9. Order them from smallest to largest.

Regrouping 3-digit and 4-digit Numbers Flexibly



How many different ways can you regroup 236?

Regrouping Questions:

1. True or False

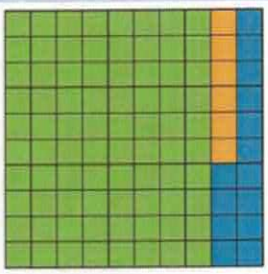
354 can be made from 35 tens and 4 ones

2. I am thinking of a 3-digit number. The sum of the digits is 15. The tens digit is twice the ones digit. What is my number?

3. True or False?
3900 can be made from 390 tens or 39 hundreds.

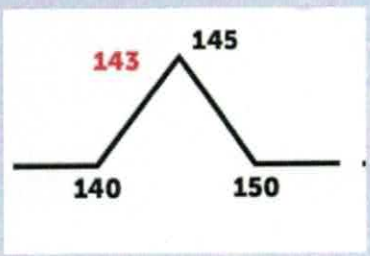
Year 3.4 Rounding Numbers to the nearest 10, 100 and 1000

Round 86 to the nearest 10

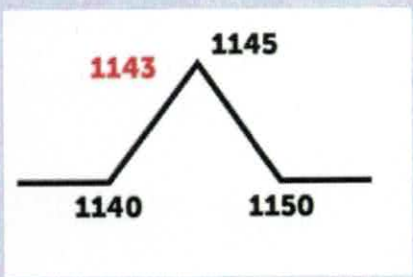


80 is the ten before and 90 is the ten after.
86 is closer to 90 than 80.
86 ≈ 90

Round 143 to the nearest 100



Round 1143 to the nearest 1000



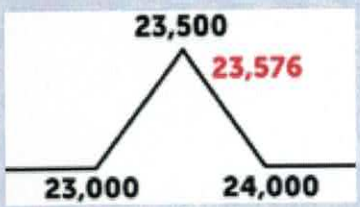
Rounding Questions:

1. Caroline thinks that the largest whole number rounded to 400 is 449. Is she correct? Explain why.

2. When a number is rounded to the nearest 100 it is 200. When the same number is rounded to the nearest 10 it is 250. What could the number be?

Year 5.6 Rounding Numbers to the nearest 100, 1000 and 10,000

Round 23,576 to the nearest 100, 1000 and 10,000.



Rounding as estimation for addition and subtraction

7834 + 79,996

Round as estimation for multiplication and division

688 x 79 =

789 ÷ 79 =

Rounding Questions:

1. Calvin rounded 215,678 to the nearest ten thousand and wrote 220,678. Can you explain to Calvin what mistake he has made and why he has done it?

2. Which one is the odd one out?

345 + 452 =800

691 + 113 = 800

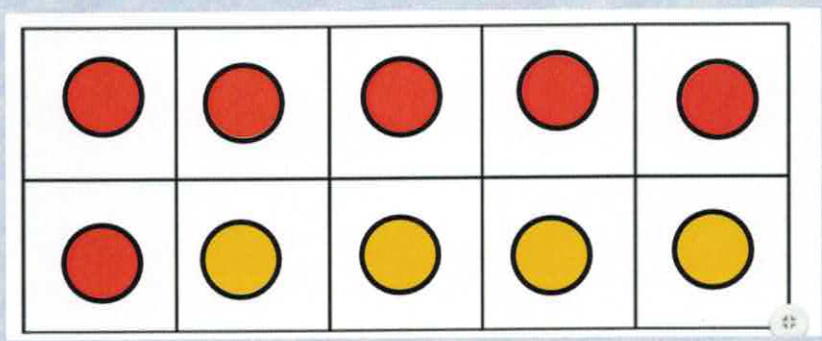
368 + 482 = 800

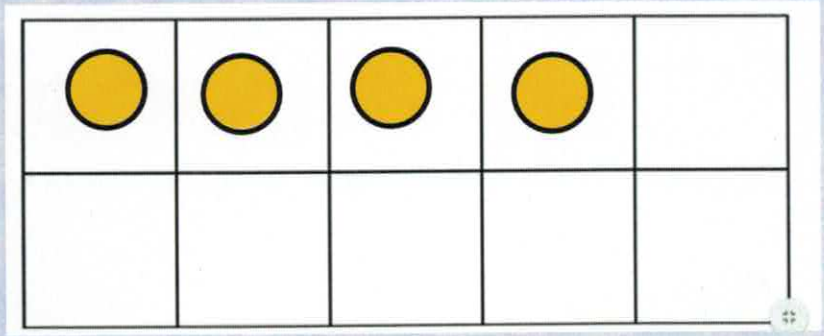
Addition and Subtraction

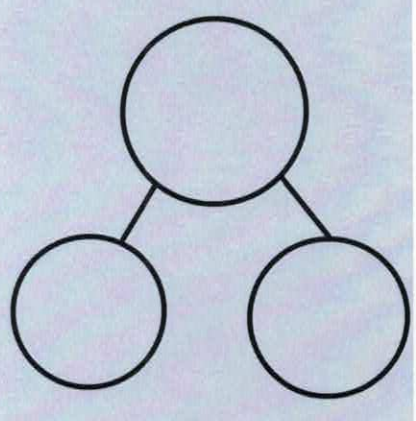
Year 3.4 Regrouping for Addition

Think 10

176 + 8 =

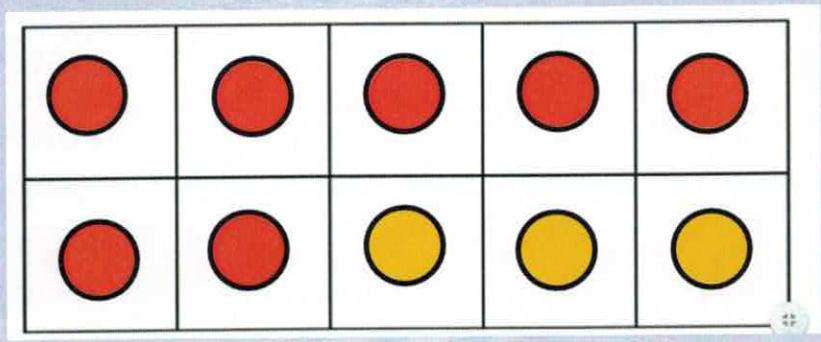


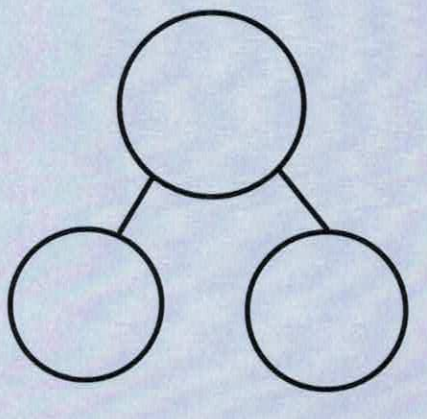


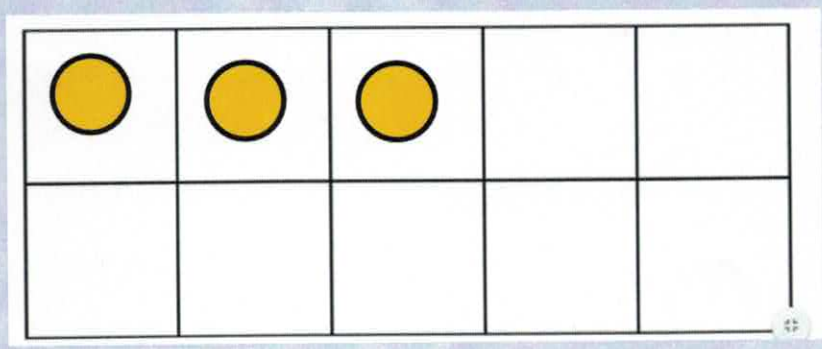


Think 100

370 + 60 =



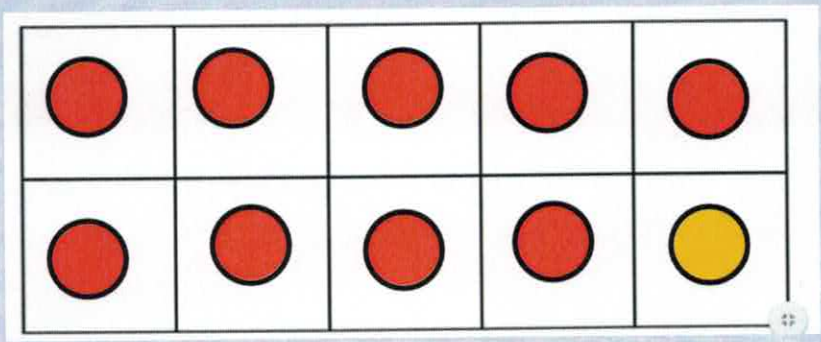


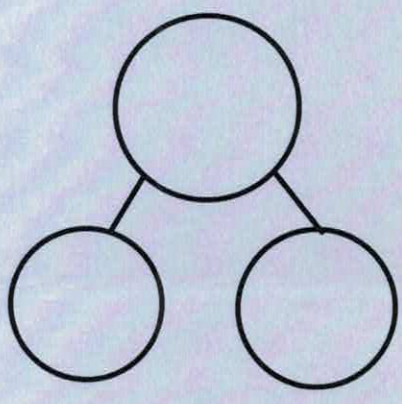


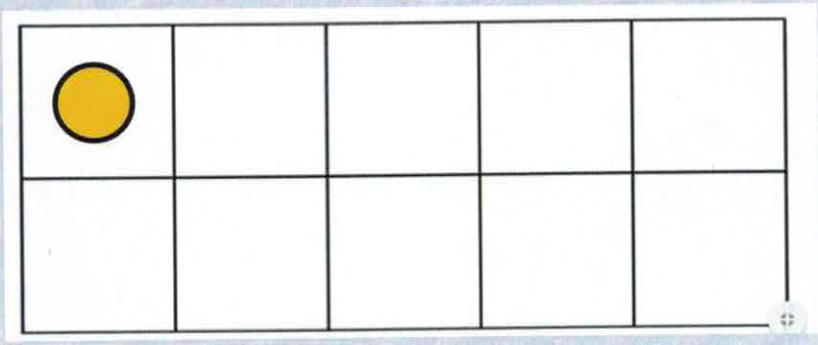
Year 5.6 Regrouping for Addition

<u>Think 1000</u>
Think 10 and Think 100 continues to be a strategy used

8900 + 230

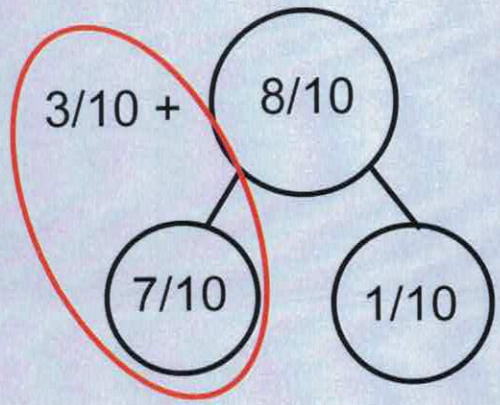


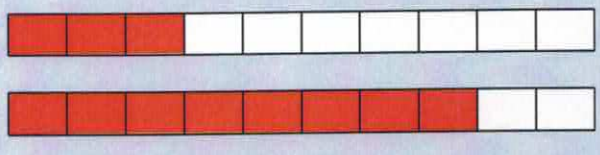




Regrouping with the Addition of Fractions

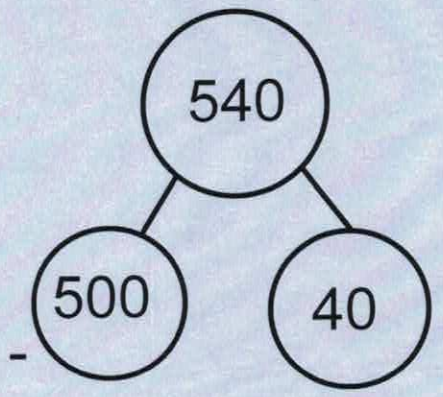
3/10 + 8/10





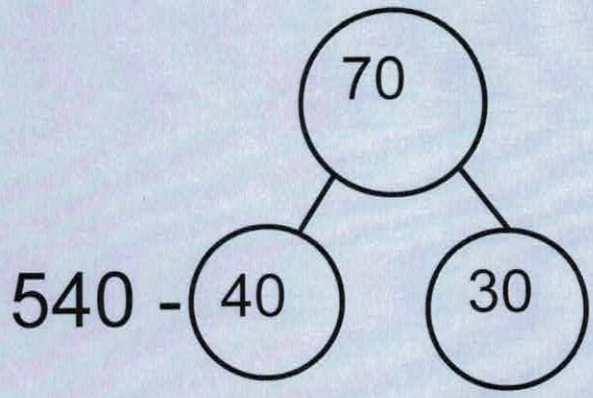
Regrouping for Subtraction - Regrouping the minuend

540 - 70



Subtraction - Regrouping the subtrahend

540 - 70

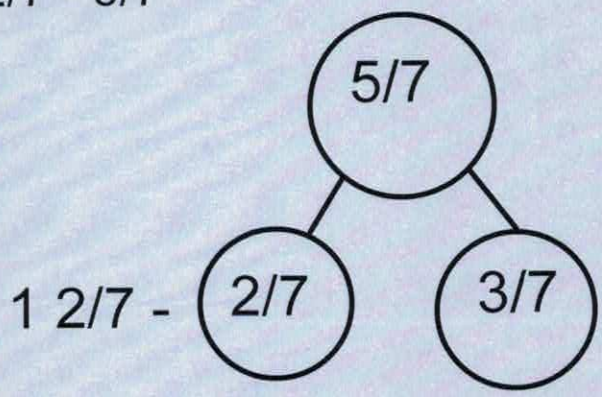


74 - 27 =

Which strategy do you prefer?

Regrouping with the Subtraction of Fractions

1 2/7 - 5/7



Lower KS2 Addition and Subtraction Questions

'Think Regroup' for addition

Think 10

37 + 45 68 + 23 29 + 75
76 + 27 55 + 16 42 + 38
537 + 8 727 + 5 213 + 18 146 + 37
36 - □ = 29 56 - 2□ = 33 □7 – 45 = 32

Think 100

290 + 13 370 + 50 580 + 73
270 + 51 67 + 350 860 + 69
86 + 770 680 + 63

Think 1000

4900 + 500 4800 + 260 6900 + 430
3200 + 910 230 + 7900 570 + 8500
3700 + 370 3622 + 500

Think 1

2.7 + 1.4 $2\frac{8}{10} + \frac{3}{10} =$ 6.5 + 5.6

$1\frac{7}{8} + 1\frac{5}{8}$

'Think Regroup' for subtraction

Think 10

97 - 8 74 - 7 53 - 5 63 - 37
77 - 32 84 - 26 57 - 28 256 - 37
25 + □ = 85 163 + □ = 363 426 + 2□2 = 668

Think 100

230 - 70 660 - 82 420 - 77 950 - 147

Think 1

1.3 - 0.6 $1\frac{4}{8} - 1\frac{5}{8}$ 3.4 - 2.7 $2\frac{1}{3} - 1\frac{2}{3}$

Upper KS2 Addition and Subtraction Questions

Place Value

937 + 100 1969 + 100 546 - 40
1.7 + 0.05 40 000 - 500
246 ÷ 1 100 x 217 0.4 ÷ 10
1.68 x 100 100 x 100

Examples from 2016 KS2 and Sample Papers

435 - 30 979 + 100 3.005 + 6.12 2.15 + 0.05
100 x 412 0.9 ÷ 10 1.28 x 100 50,000 – 500
10 x 100

Two decimal numbers add together to equal 1 One of the numbers is 0.007. What is the other number?

Circle two numbers that added together make 0.25
0.05 0.23 0.2 0.5

Circle two numbers that multiply together to equal 1 million 200 2,000 5,000 50,000

Write the number that is 5 less than 10 million

Write the number that is one hundred thousand less than six million

Round 124,531 to the nearest 10,000, 1,000, 100

Think Regroup

58 + 6 5 + 47 630 + 73 680 + 78
560 + 89 8900 + 230
74 - 7 97 - 8 320 - 50 2300 - 600
3400 - 1700

5 - 2.65 8.1 - 2.75 $1\frac{2}{5}+\frac{3}{10}=$ $1\frac{3}{10}-\frac{2}{5}=$
£3367.40 - £1021.23

Examples from 2016 KS2 and Sample Papers

4 - 1.15 $1\frac{4}{5}+\frac{3}{10}$ $1\frac{1}{4}+\frac{1}{3}$ $1\frac{1}{5}-\frac{1}{4}$ $\frac{3}{4}+\frac{7}{8}=$
5,756 + 8,643 936 + 285

Times Tables

Times Table Expectations for Your Child

Below are the times tables that your child should know as a minimum by the end of year. This is in line with national expectations

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Count in multiples of 2, 5 and 10. Know off by heart the doubles and halves of numbers to 12.	To use multiplication and division facts for the 2, 5 and 10 times table	To use multiplication and division facts for the 2, 3, 4, 5, 8 and 10 times tables.	All of the multiplication tables up to 12x12, including related division facts.	Revision of all multiplication and division facts for the times tables up to 12x12 and to know prime numbers up to 13.	As for Year 5 and knowledge of prime numbers to 100. To identify common factors and multiples.

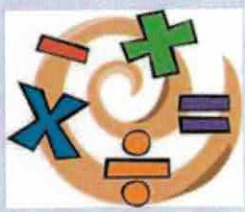
Times tables are crucial in helping your child progress in all areas of maths. Children who know their times table facts are able to answer questions more quickly and are able to solve more complex problems rather than being slowed down by multiplication.

What is the Year 4 Multiplication Tables Check?

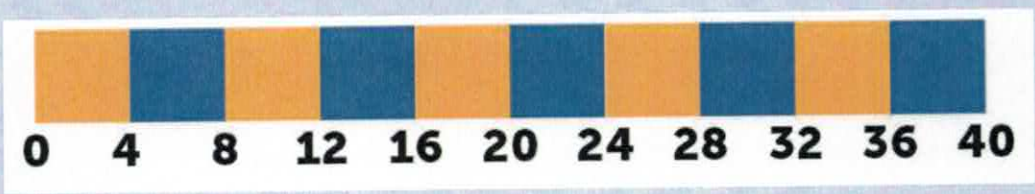
In June 2020, children in Year 4 will sit a new, national statutory multiplication test.

This is an online test and focuses on answering questions on the times tables up to 12 x 12 accurately and at speed.

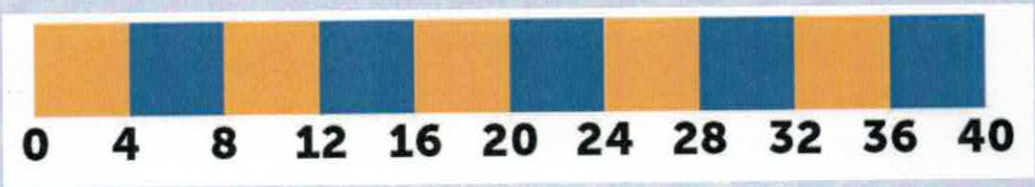
The children will be asked 25 questions on the times tables and are given six seconds per question, with a three second rest between questions.



Boomerang Stick

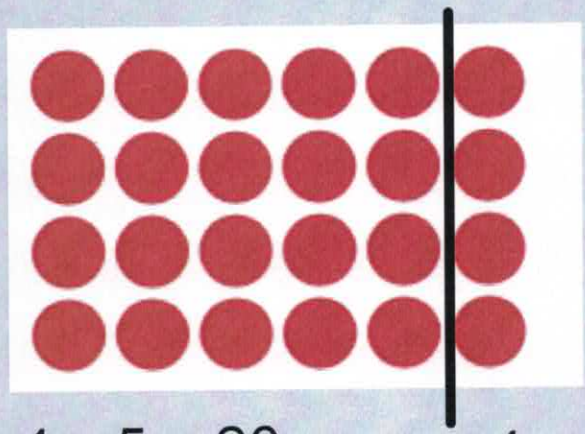


Hiccup Stick



'Think 5' Strategy for Multiplication

4 x 6

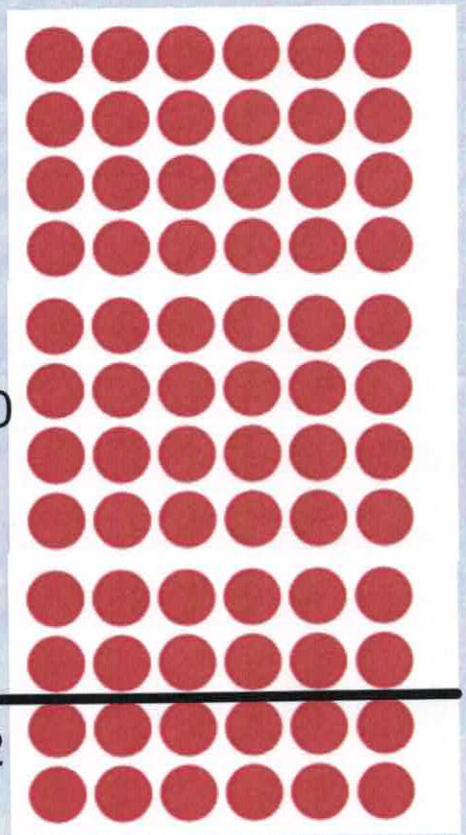


4 x 5 = 20 4 x 1 = 4

20 + 4 = 24

'Think 10' Strategy for Multiplication

12 x 6



10 x 6 = 60

2 x 6 = 12

60 + 12 = 72

Useful Websites

https://www.mymaths.co.uk/

https://www.timestables.co.uk/

https://www.topmarks.co.uk/maths-games/7-11-years/times-tables

http://www.primaryhomeworkhelp.co.uk/maths/timestable/interactive.htm

https://www.mathsisfun.com/timestable.html