

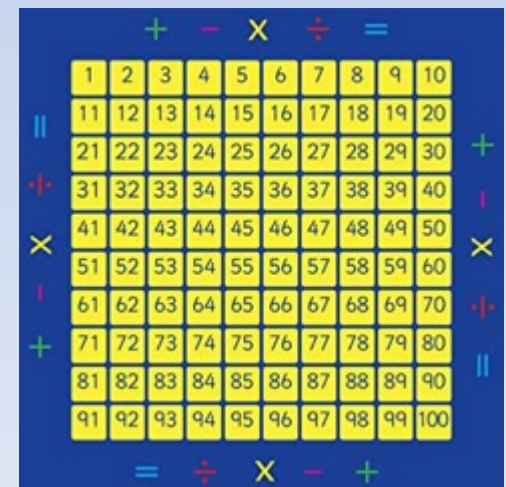
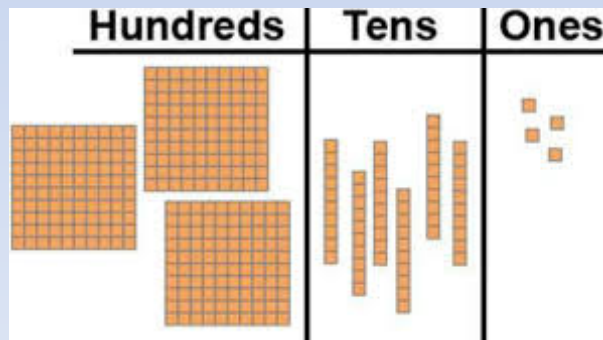
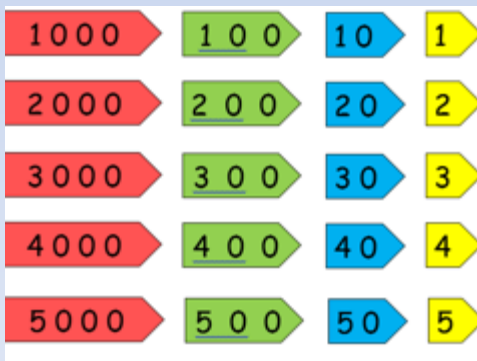
There is a difference between not knowing and
knowing yet

Maths Workshop

16.1.2019

Resources

- Please take a few moments to look at the resources in the room with your child.
- Ask your children what they can be used for.



Expectations

Year 3

- I can recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
- I know all the facts for the 3,4 and 8 times tables.

Year 4

- I can recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, ones)
- I know all the facts for times tables up to x12.

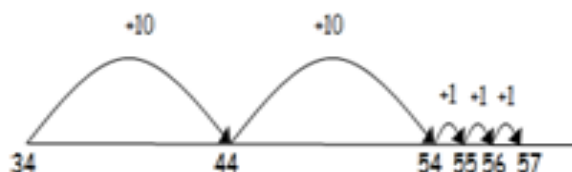
Foundations

- Our aim is for all children to have a strong knowledge and understanding of Place Value. This is because it is important all the way through their school career and is essential for the understanding of further maths learning and concepts.

Calculation Policy

Step 5

$$34 + 23 = 57$$



Children will begin to use blank number lines where they draw a line starting with the larger number and counting on the number they are adding. First counting on in jumps of tens and then ones.

Children may also use a hundred-square in class to support their understanding. They will be encouraged to jump down in 10s and forwards in units.

How to use a hundred square...



Step 6

Partitioning:

$$222 + 53 =$$



$$\begin{array}{r} 200 + 20 + 2 \\ \quad 0 + 50 + 3 \\ \hline 200 + 80 + 5 \end{array}$$

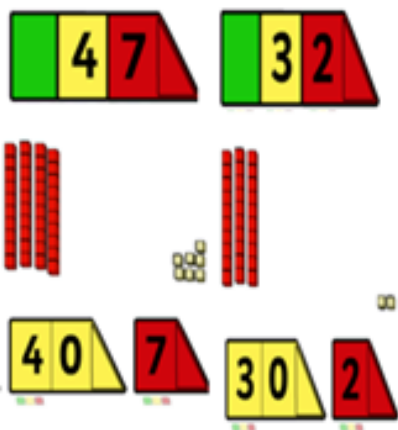
Key vocabulary: add, more, plus, and, make, altogether, total, equal to, equals, double, most, count on, sum, tens, units, partition, plus, addition, hundreds, increase, thousands, hundreds, digits, inverse.

Subtraction

Step 5

Partitioning:

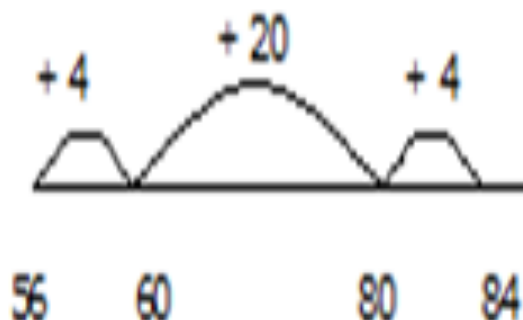
$$47 - 32 =$$



Key vocabulary: equal to, take, take away, less, minus, subtract, leaves, how many more, how many fewer / less than, how many left, how much less is_? difference, count on, partition, tens, units, **exchange**, **decrease**, hundreds, value, digit.

Step 6

$$84 - 56 = 28$$



Mental Methods

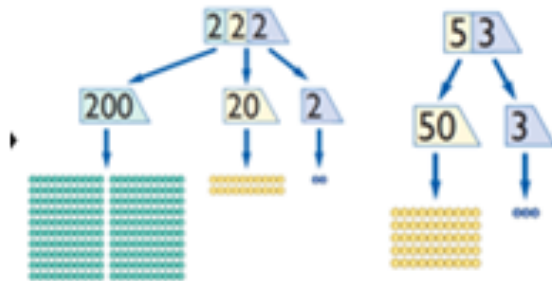
Most of the teaching in Year 3 focuses on mental methods for adding and subtracting.

Understanding place value is important for children to be able to do this.

Step 6

Partitioning:

$$222 + 53 =$$

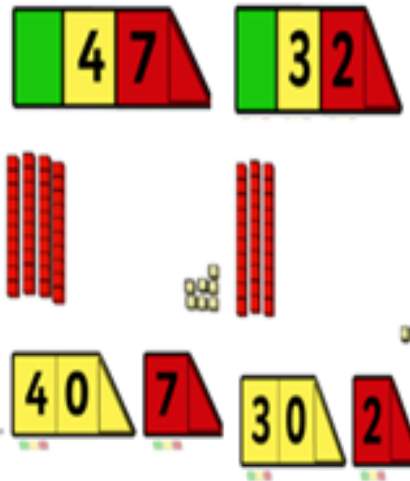


$$\begin{array}{r} 200 + 20 + 2 \\ \quad 0 + 50 + 3 \\ \hline 200 + 80 + 5 \end{array}$$

Step 5

Partitioning:

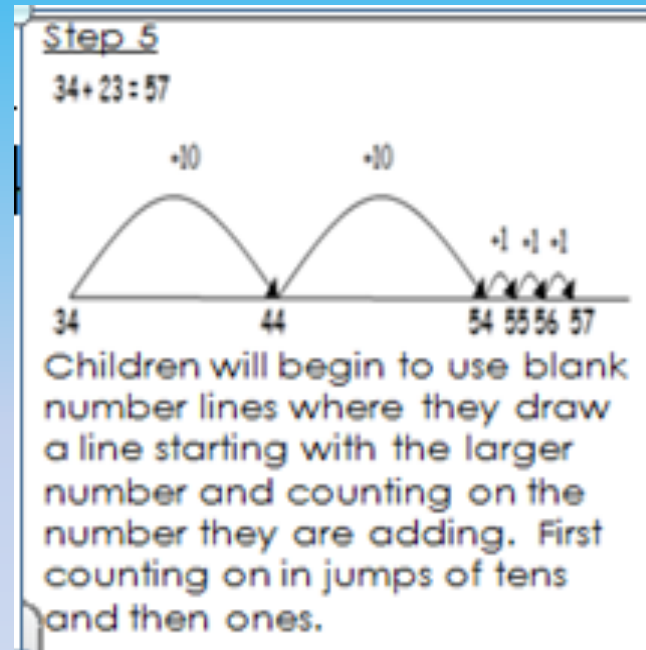
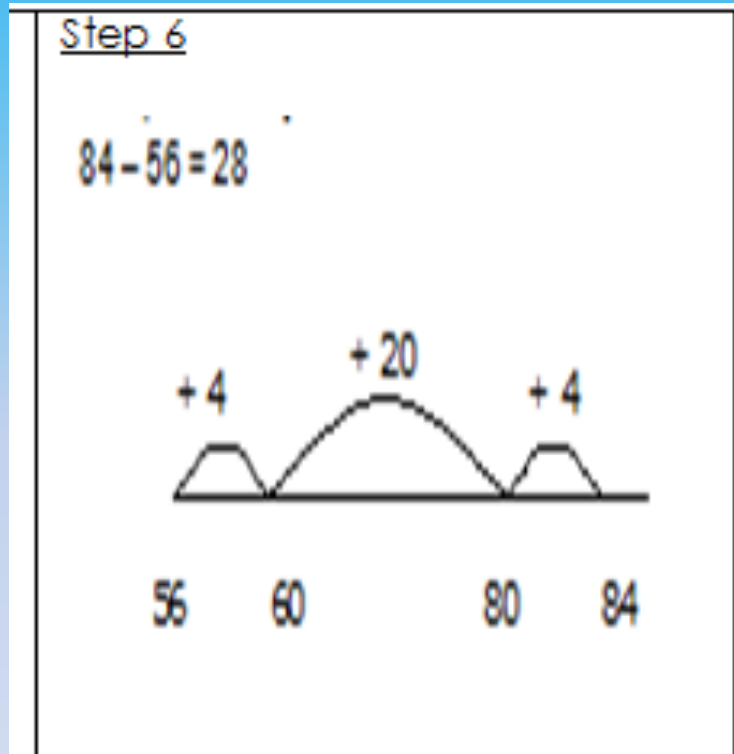
$$47 - 32 =$$



Key Vocabulary

Partition
More than
Less than
Hundreds
Tens
Ones

Mental Methods



Key Vocabulary

Numberline
Jumps
Counting on
Counting back

Children shouldn't be focusing on written methods until they are secure with place value. It is not about whether they can answer the question, it is about whether they understand the process.

Mastery

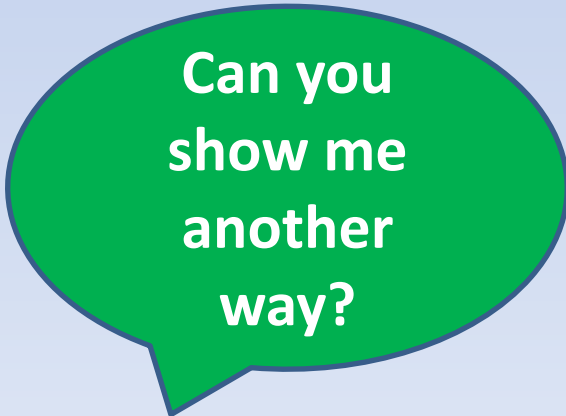
- When children have a good understanding of what they have learnt, they can explain it to someone else.
- Ask your children questions about their learning at home.



**How do
you know?**



**Can you
explain?**



**Can you
show me
another
way?**

Practical ideas for you

Multiplication tables

- Timetables are key when learning the basic principles of maths.
- Quick recall of timetables up to 12 (Y4) up to 8 (Y3) can help figure out the tricky inverse ; Division.
- Through the continuous repetition of the multiplication tables it helps students develop mental arithmetic skills and be able to work independently in their heads.

MTC assessment – Timetable Check

- The government have introduced a new assessment framework for multiplication tables.
- The MTC will become a statutory requirement in Y4 from 2018/19 academic year.
- In June of this year, Y4 will be taking a pilot of the check.
 - Children are expected to have fluent recall of all multiplication tables. There is an emphasis on the 6,7,8,9 and 12 multiplication tables as these have been determined to be the most difficult. There is no 1 x tables.



How does it work?


- The test will be delivered as an online, on-screen assessment in school.
- The duration of the test is 5 minutes.
- Each test consists of 25 questions worth one mark each.
- Pupils will have 6 seconds to enter a response to the question before it starts the next.
- Schools will be able to access a practice area prior to the check opening to familiarise children with the format.
- Overall the government states that it allows pupils to demonstrate their knowledge and provide opportunities.

How can you help at home? – Quick wins


- Flash cards
- Laminate cards
- Walking, skipping count
- Large posters - £1 shop
- Use of apps and websites.

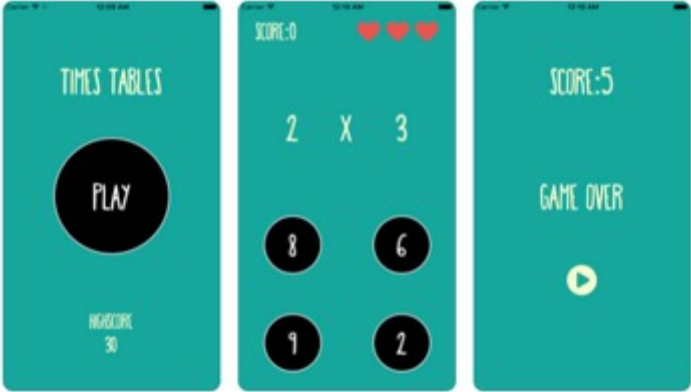
Apps

 **10 Minutes a Day Times Ta...**
Education 
★★★★☆ 138



RACE ME!
Choose your times table

 **Times Tables - Let's I...**
Education [OPEN](#)



SCORE: 0

SCORE: 5

GAME OVER

 **Times Tables Kids**
Education [GET](#)



Times Tables

Billy

Exercises

Memorize

Recite Forwards

Recite Backwards

Questions

Results

Memorize 2x

1 x 2 =	2
2 x 2 =	4
3 x 2 =	6
4 x 2 =	8
5 x 2 =	10
6 x 2 =	12
7 x 2 =	14
8 x 2 =	16
9 x 2 =	18
10 x 2 =	20
11 x 2 =	22
12 x 2 =	24

Websites

- <https://www.mathplayground.com/multiplication01.html>
- <https://www.topmarks.co.uk/maths-games/daily10>
- <https://www.mathsisfun.com/tables.html>

Place Value Activities

- **Hat Trick**
- Write the numbers 0 through 9 on separate index cards or scraps of paper and place them in a hat. Have your child draw one, two, or three cards out of the hat. He or she can make different numbers. For example, if your child pulls the numbers 3, 6, and 9, he or she can make 3, 6, 9, 36, 39, 396, 693, etc. Challenge your child to make as many numbers as possible using the cards. What is the smallest number your child can make? What is the largest number? Help your child compare numbers by looking at the largest place values.
- **Race to 100**
- Each player needs an open number line (either on paper or whiteboard). Take turns rolling 2 dice at a time. Use the two numbers rolled to make the largest 2 digit number you can. Add the number to your number line. The first player to reach 100 wins! *You can also use 3 dice to make 3 digit numbers and race to 1000!
- **Number Hunt**
- Take a walk with your child around the neighborhood. Look for one-, two-, three-digit numbers and have your child read them out loud. You may want your child to record the numbers that he or she sees. Discuss each number and ask how many ones, tens, or hundreds are in the number. What is the largest number you can find? What is the smallest number?
- **Quick Pic Matching**
- □ III..
- **132**
- Create a matching game using cards/papers. On one card, write a numeral and on another draw a 'quick pic' to represent the numeral (example below). 'Quick pics' are a combination of squares, lines, and dots representing hundreds, tens, and ones. Take turns turning cards over to find matches, and the player with the most matches wins. One person play: set a timer, and see how many matches you can make in 5 minutes.

Fun Online Games

- [http://www.abcya.com/base ten bingo.htm](http://www.abcya.com/base%20ten%20bingo.htm)
- [http://www.abcya.com/guess the number.htm](http://www.abcya.com/guess%20the%20number.htm)
- [http://www.abcya.com/place value hockey.htm](http://www.abcya.com/place%20value%20hockey.htm)
- [https://www.sheppardsoftware.com/mathgames/place value/fruit shoot place value.htm](https://www.sheppardsoftware.com/mathgames/place%20value/fruit%20shoot%20place%20value.htm)
- [https://www.sheppardsoftware.com/mathgames/place value/mathman place exp.htm](https://www.sheppardsoftware.com/mathgames/place%20value/mathman%20place%20exp.htm)
- <https://www.topmarks.co.uk/learning-to-count/place-value-basketball>
- <http://www.math-play.com/Place-Value-Millionaire/place-value-millionaire-game.html5.html>