Olive School

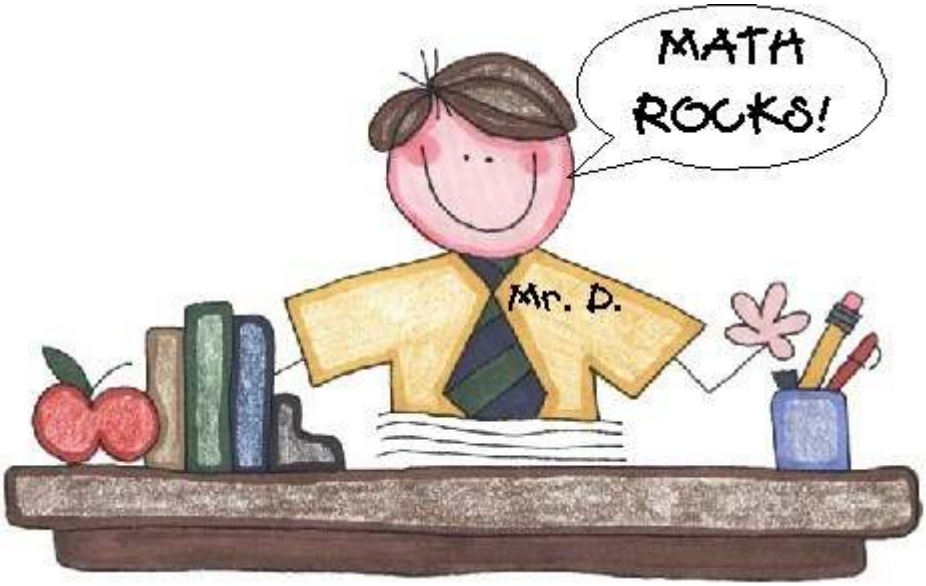
Year 2 Mental Maths Workshop

The teaching and learning of Maths has changed!

- More collaborative learning
- More practical opportunities
- 'Having a go' and talking through is encouraged
- MENTAL MATHS IS VERY IMPORTANT IN ALL OF THIS!

What Mental Maths have YOU done to-day?

Have I got time to do the washing before I go out?
Do I have enough petrol to last the journey?
Do I need a trolley for my shopping or will a basket be okay?
NONE OF THIS IS WRITTEN DOWN – IT'S MENTAL MATHS!



Why do children need to be secure with Mental Maths?

- It builds up their confidence and helps towards written Maths
- They need to build up skills slowly so that they retain them
- They need basic facts at their fingertips
- They need to learn some facts by rote learning (by heart)

How is Mental Maths taught at the Olive School?

- A 10 minute differentiated activity every morning when children arrive in school.
- A 10-15 minute starter for every Maths lesson, 5 times each week.
- Children are encouraged to use their Mental Maths skills during activities in each Maths lesson.

What can I do to help?

I can count on and back in 2's from 0.

0, 2, 4, 6, 8, 10 ….

12, 10, 8, 6, 4 …

I can count on and back in 100's from 0.

Activities:

- Chant in 2s forward and back
- Number sequences and missing numbers e.g. 2, _, 6, _, 10, _
- Grouping and counting money e.g. Give children a pile of 2p coins and ask ch how much money they have got. Then they can spend 2p at a time, counting back in 2s.
- Count real life objects e.g. cars, toys, sweets

I can recall multiplication and division facts for the 2, 5 and 10 times tables.

e.g.

0 x 10 = 0

1 x 10 = 10

11 x 10 = 110

12 x 10 = 120

0 ÷ 10 = 0

10 ÷ 10 = 1

110 ÷ 10 = 11

120 ÷ 10 = 12

Activities:

- Sing as a song – make up your own tune or choose one from the internet e.g.

http://www.youtube.com/watch?v=1MVkqSP6bBE

- Rote learning (learn off by heart)
- Questions with missing answers e.g. ? X 10 = 90
- Discuss patterns

I can recall doubles and halves to 20.

Double 1 = 2 Double 2 = 4 Double 10 = 20

Half of 2 = 1 Half of 4 = 2 Half of 20 = 10

Activities:

- Rote learning
- Discuss patterns e.g. Double 2 is 4 and half of 4 is 2
- Give even numbers of money/fruit/sweets/ to halve
- Sing with actions (use fingers)
- Dice – roll a dice and ask them to double the number.
- Spinners - roll the spinner, look at the number and say the double e.g. Double 5 is 10. Can download spinners from the internet e.g. http://www.senteacher.org/worksheet/13/Fractions.html
- Give children some mulitples of 2 cards. They turn over a card and halve the number e.g. Half of 12 is 6

I can recall addition and subtraction facts to 20.

20 + 0 = 20 19 + 1 = 20 20 – 0 = 20 20 – 1 = 19

Activities:

- Rote learning
- Sing the number bond song http://www.songsforpositiveschools.com/page98.htm
- Give children number sentences with missing numbers e.g. 17 + ? = 20
- Speed test – write all the ways to make 20
- Practical applications e.g. If you have 20p and spend 7p, how much change will you get?

I can add and subtract 10 to and from any 2 digit number.

15 + 10 = 25 37 + 10 = 47 25 – 10 = 15 47 – 10 = 37

Addition tip: When adding 10 to a number, the tens number will increase by one but the units number never changes.

Subtraction tip: When subtracting 10 from a number the tens number will decrease by one but the units number never changes.

Activities:

- Play game 'I say you say' e.g. I say 25 you say 35
- 100 square – print a 100 square and colour in a number, ask what is 10 more than that number and use a different colour to colour it in. Discuss patterns.
- Ask what is 10 more / 10 less than a number
- Money – e.g. If I had 57p and then dad gave me another 10p how much money will I have? Or If I had 73p and then spent 10p how much money will I have left?

I can recall addition and subtraction facts for multiples of 10 which total 100.

100 + 0 = 100 90 + 10 = 100 100 – 0 = 100 100 – 10 = 90

Activities:

•Rote learning

•I say you say game e.g. I say 20 you say 80 (addition)

•Discuss patterns

•Money – Ten 10p coins

•Emphasise that addition can be done in any order.

I can use partitioning to add 2 two-digit number (without crossing 10)

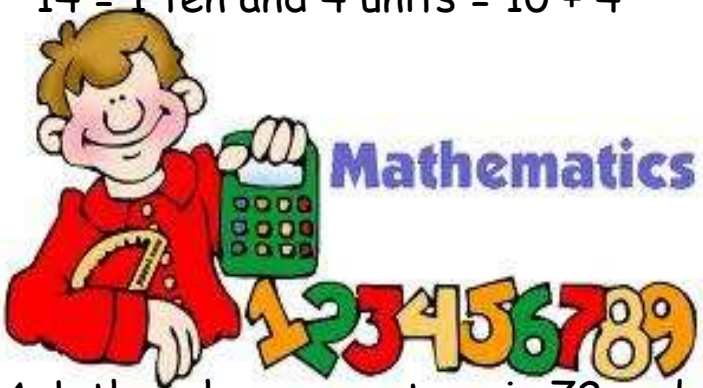
23 + 14 =

23 = 2 tens and 3 units = 20 + 3 14 = 1 ten and 4 units = 10 + 4

So …..23 + 14 = 20 + 3 + 10 + 4

= 20 + 10 + 4 + 3

= 30 + 7



Activities:

•Partition tens and units e.g. 72 Ask them how many tens in 72 and how many units. Online games e.g.

http://www.ictgames.com/arrowCards_revised_v6.html

•What's my number (4 tens, 5 units)

•Can you write the number….

•Money – e.g. If I have 25p, how many 10p coins and 1p coins do I need to make this amount?

I can use partitioning to subtract 2 two-digit number (without crossing 10)

e.g. 36 – 12 =

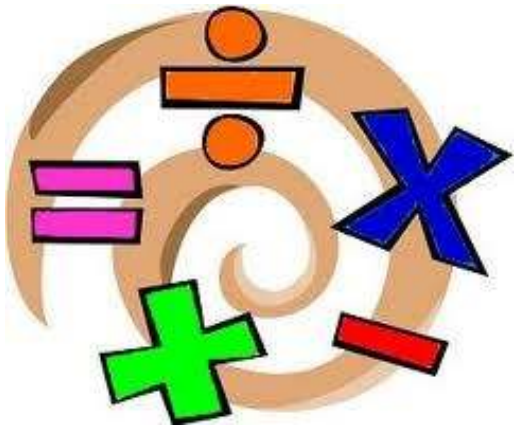
12 = 1 ten and 2 units = 10 + 2

So

36 – 12 = 36 – 10 – 2

= 26 – 2

= 24



Activities:

- Partition tens and units e.g. 72 Ask them how many tens in 72 and how many units. Online games e.g.

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•If this is the number- what are the tens and units?

•Use two dice – what 2 digit number can we make? How many tens and how many units.

•What's my number (4 tens, 5 units)

•Can you write the number….

Money – e.g. If I have 35p, then I spend 13p how much money will I have left?

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