

Maths Workshop – 31.01.18  
Topic – Number and Place Value  
Miss Barrett



# Aims of today

- To get an insight into what your child is expected to know ahead of the SATs.
- To take away some ideas to support your child at home.
- To work with some other parents and take part in a variety of maths activities.

# SATs requirements

Children should know and be able to:

- Count in steps of 2, 3, 5, 10 from 0 and from any multiple, forward and backward.
- Recognise the place value of each digit in a two-digit number (tens, ones).
- Identify and represent numbers using different representations, including the number line.
- Estimate position of a number on a number line.
- Order numbers from 0 to 100.
- Read and write numbers to at least 100 in numerals and in words.
- Represent and estimate numbers using different representations.
- Compare and order numbers from 0 up to 100; use  $<$ ,  $>$  and signs.
- Use place value and number facts to solve problems.
- Partition numbers into tens and ones.
- Use  $<$  and  $>$  to express greater and smaller.
- Identify greater and smaller.
- Begin to understand zero as a place holder.

# Why Number and Place Value?

Children need to understand our number system, starting with counting numbers, building an understanding of how our numbers work and fit together. This includes exploring place value and comparing and ordering numbers then applying this understanding in different contexts. By doing this, the children will then apply these skills to the rest of the Maths curriculum.



# Number Bonds and Number Facts

It is important that children recognise number bonds which are different pairs of numbers with the same total. You can practise this at home with games of Bingo or any other quick fire games.

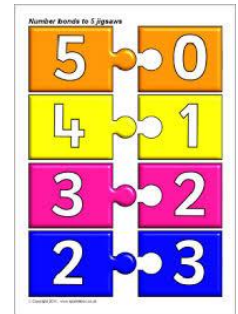
**10**  
 $7 + 3$   
 $6 + 4$



**8**  
 $6 + 2$   
 $5 + 3$

**6**  
 $3 + 3$   
 $5 + 4$   
**9**  
 $6 + 3$

**5**  
 $3 + 2$   
 $1 + 4$



$6 + 1$   
**7**  
 $3 + 4$



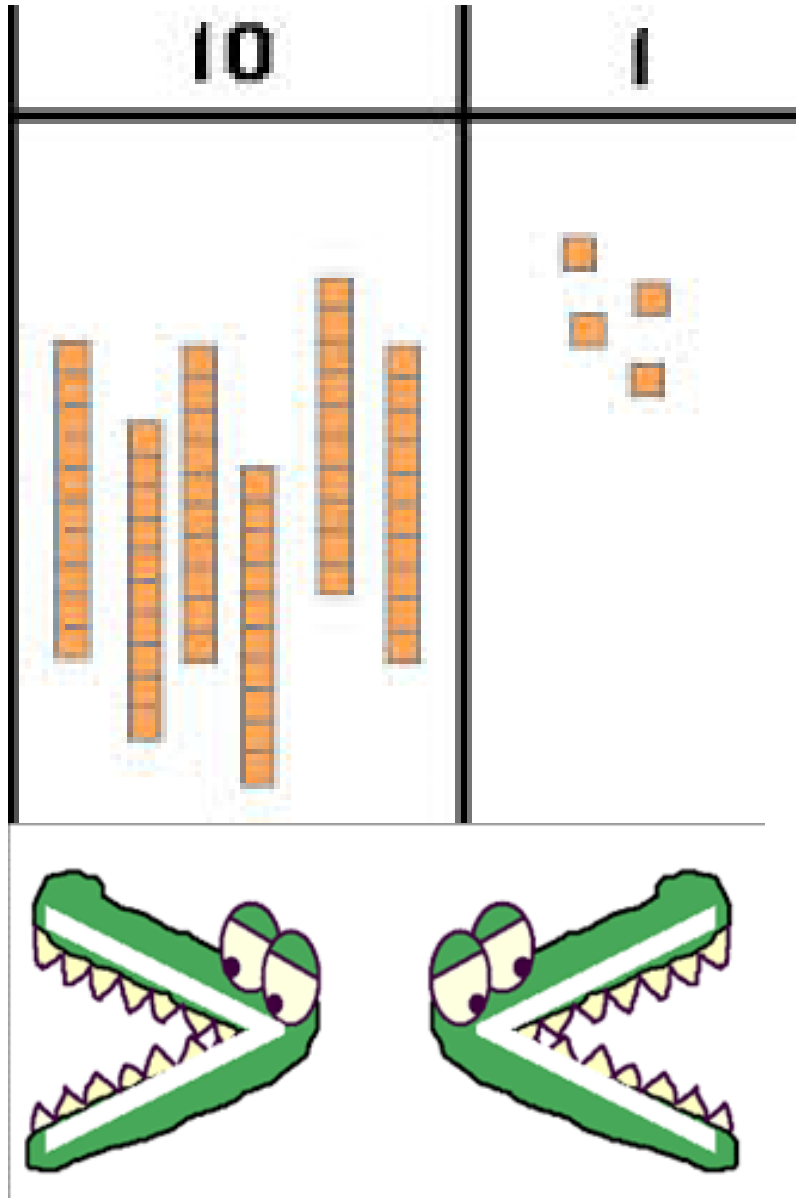


# Place Value and Partitioning

Place value is at the heart of the number system. All digits have a value and a secure understanding of this will enable children to use and understand different calculation methods.



# Place Value and Partitioning



By knowing what this number is, we can quickly teach the children not only how to add and subtract, but we can also teach them why the digits within each number change. Doing this physically is a brilliant way of making sure children can do this physically. Remember, partitioning also helps children work with Charlie Crocodile!

# Place Value and Partitioning

$$432 + 325$$

$$400 + 300 = 700$$

$$30 + 20 = 50$$

$$2 + 5 = 7$$

$$700 + 50 + 7 = 757$$

$$757 - 432$$

$$700 - 400 = 300$$

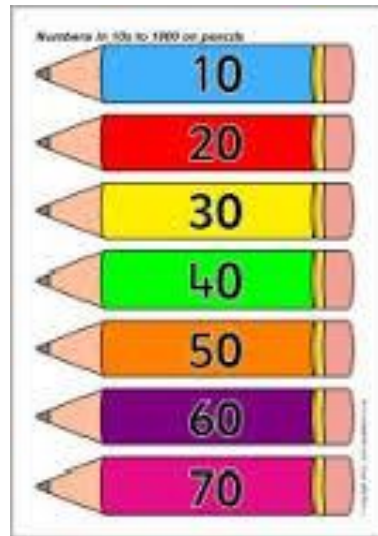
$$50 - 30 = 20$$

$$7 - 2 = 5$$

$$300 + 20 + 5 = 325$$



# Keep Counting!



Count in steps of 2, 3, 5, 10 from 0  
and from any multiple,  
forward and backward.



# Activity ideas



- Draw a line. Mark 0 and 100. Roll a dice twice to make a 2-digit number. Decide where that number would go and write it in. Repeat. This could also be played with playing cards.

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0

100

Challenge the children by putting a number in the wrong place. Can they explain why it's wrong? Can they say where it should go instead?

# Activity ideas

## Count Back Champions

Pick any 2 digit number and a count-back step, e.g. 2, 3, 5 or 10. Choose who goes first.

Taking it in turns, count backwards. You could say 1 number, 2 numbers or 3 numbers. If you say the incorrect number, you sadly lose. If you are the first person to reach 0 after counting-back, you are the winner!

This can also work with counting forwards.

# Nice or Nasty!



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## Nice version!

Have a target total and the winner is whoever gets closest to that target without going bust.

## Nasty version!

You are allowed to place digits on your partner's board to make it trickier for them.

This game can be played in a number of ways, including with decimals. Either play it by seeing who can end up with the highest (or lowest) number. You need to decide beforehand. Using a 1-9 dice, take turns to roll it. Whatever number you land on needs to be placed on one of your squares. If you are making a 3 digit number, for example, and you are seeing who gets the highest number then you would be hoping to place any larger numbers in the hundreds column and smaller ones in the ones column, but you never know what you will roll! You can also play a version where you add numbers and decide on your target total at the start of the game.

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	2 Sahand H		Deansbrook Junior School, LONDON, United Kingdom				11,813
	3 Farhan M S		Green Valley Islamic College, NSW, Australia				11,223
	4 Zuhaib I		Wensley Fold Church of England Primary School, Blackburn,				11,198
	5 Harvey A		Little Common School, Bexhill-on-Sea, United Kingdom				11,128
	6 Caitlin P		Orchard Vale Community School, Barnstaple, United				11,070
	7 Maxine Bo W		Yew Chung International School of Shanghai - Hong Qiao				11,064
	8 Jade K		New Farm State School, QLD, Australia				10,490
	9 Dihein N		Belmont Castle Academy, Grays, United Kingdom				10,104
	10 Kiara S		Busselton Primary School, WA, Australia				8,452

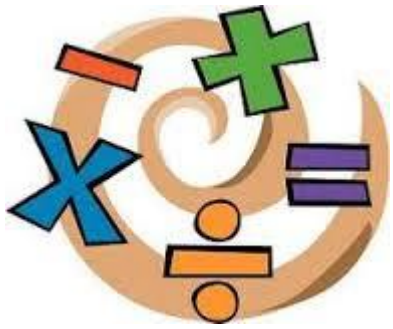


**Mathlete of The Week**

**Dylan Mark J**  
Crawford Preparatory - Fourways  
South Africa

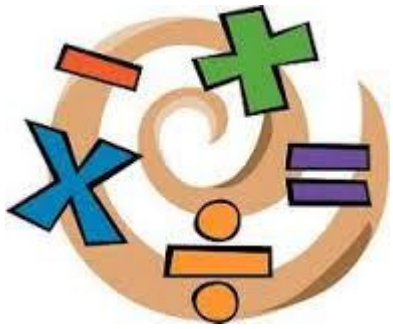
**PRIZE: Specially Made Trophy**

[How is it calculated?](#)



Thinking is at the heart of Mathematics and therefore should be at the heart of mathematical teaching and learning.





Any questions?

