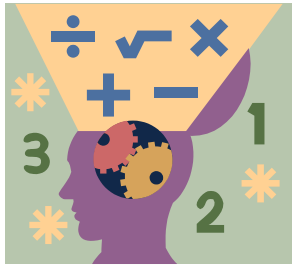
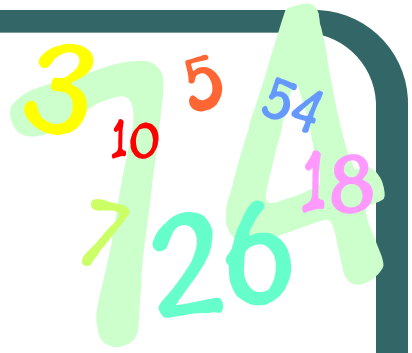
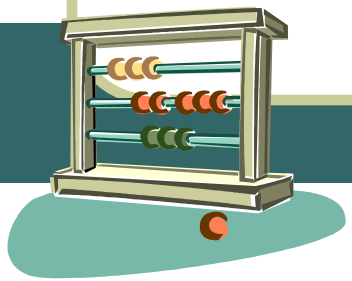


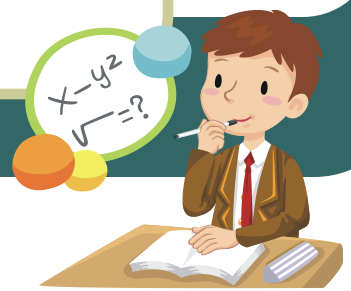


Numeracy
How can we help?

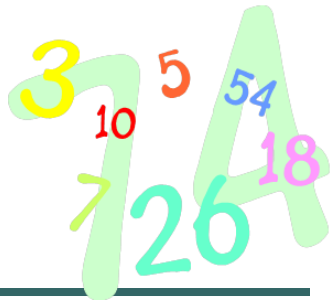
'LEARN TOGETHER'

Let's learn to enjoy, achieve, respect and nurture together





Introduction



- Whole School Calculation Policy
- Teaching methods have changed – *focus now on understanding and visualisation rather than following a set of given steps to solve problems*
- Number – reading symbols of quantities
- Visualisation – *understanding quantities*
- Literacy & Numeracy Framework
- Web Page

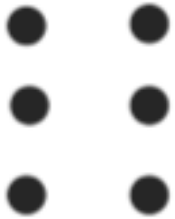
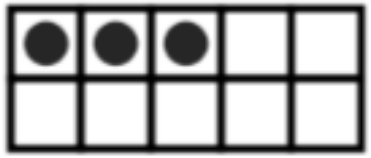
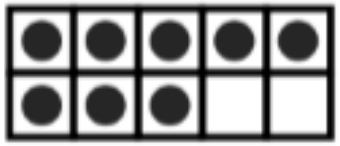
Number

- Spot numbers in environment
- Learning numbers, reading skill
- Number formation rhymes

Visualisation

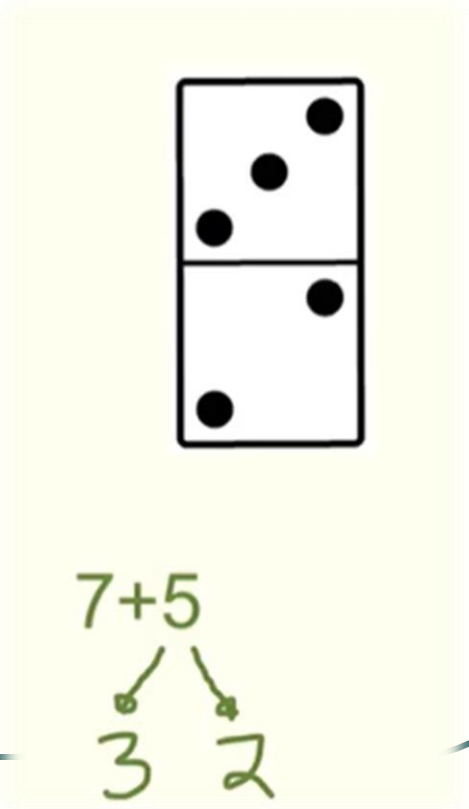
- Children develop feel for number
- Develop strong link between number and quantity
- Estimate, counting when out and about.

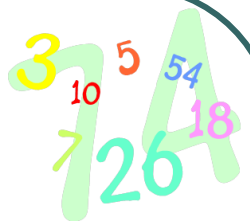
Two More Bingo

Supporting understanding

- Learn to <u>subitize</u> with small numbers, up to 7.
- Use dominoes, counters, buttons, fingers.
- <u>Subitizing</u> provides a basis for enhancing a child's knowledge of part-whole number knowledge, which has implications for learning basic number facts.





Supporting visualisation

Use a variety of resources;

- Quantity cards
- Fingers
- Dotty patterns
- Base 10 boxes
- Tally counting
- Numicon
- Counting teddies and animals
- Counters
- Important that children can count small numbers from larger quantities.

Visualisation in School

- Continuous provision Maths Area

- Challenge visualisation cards and number lines

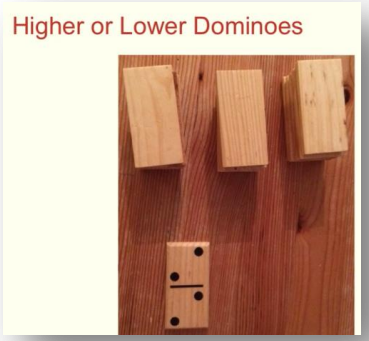
Fingers

- Fingers- *important tool in learning maths.*
- Show me with fingers.
- Finger games-
- *www.youcubed.org/visual-math-network*

Playing Games

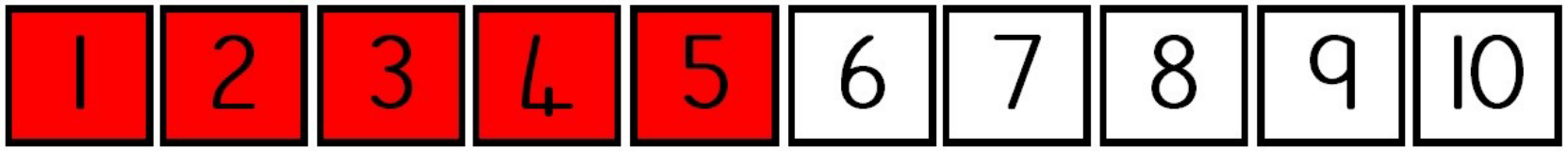
- So much of a young child's introduction to mathematics involves counting. Although counting is an important skill, we often ignore the spatial sense of a child, (their ability to think in dynamically visual ways).
- Dot patterns –helps understanding of quantities, subitizing and grouping.
- Dominoes – seeing whole split into 2 parts,
- Encouraging visualisation with dominoes. *Eg there are four dots on one side of the domino. Ask the child, is there one dot or four dots? Without counting, encourage them to take that risk and make an educated guess. Then count the number of dots to check if they were right.*

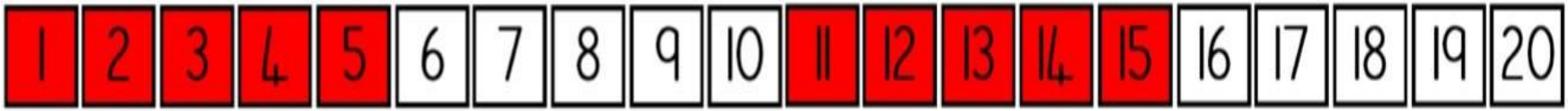
Domino Games



- Higher or Lower – a game for 2 – 6
- Dominoes are placed face down in piles.
- *First player turns over domino, says the number and then guesses the next domino will be higher or lower. If they are correct they have a counter and have another go. The winner is the one who has most counters.*

Number line





- Use number line in school as a tool for counting on and counting back.
- Start of formal addition and subtraction.
- Start to write number sentences

Important Number Skills

Counting on and back in 1s and 10s

Number bonds to: 4, 5, 6, 7, 8, 9, 10

6 e.g. 6 + 0

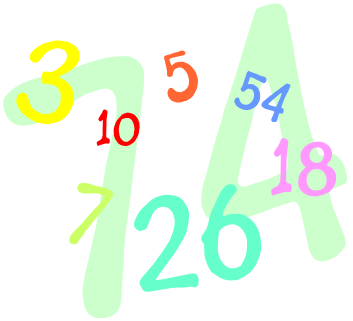
5 + 1

4 + 2

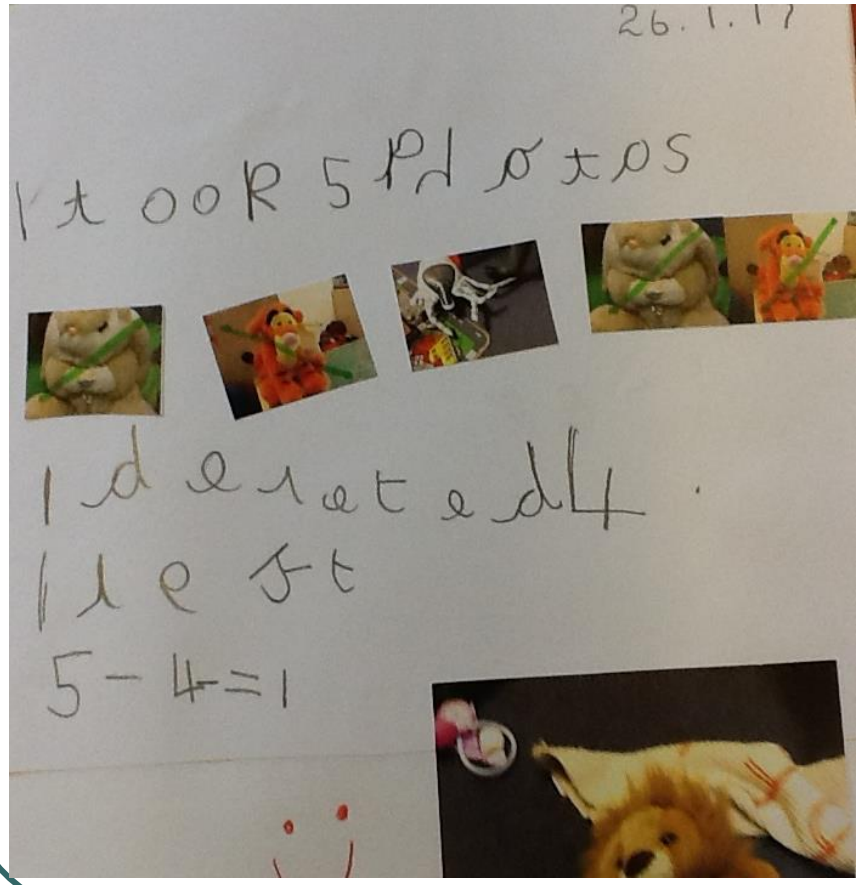
3 + 3

10 e.g. 7 + 3

100 70 + 30 (v)



Subtraction – Taking Away 1 digit numbers



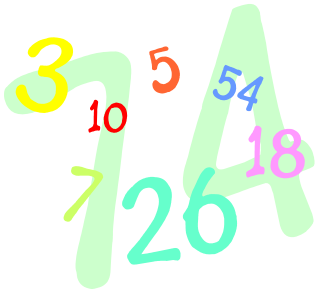
- Begin by using objects and counting back in 1's
- Children physically take away things.

Inverse operations

- Encourage children to recognise that addition is an inverse of subtraction;

e.g. $3 + \boxed{2} = 5$

$5 - 3 = \boxed{2}$

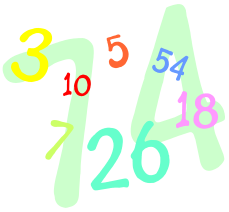


Plenary

- **Mental strategies:**
  - Importance of having a good understanding of visualisation of quantities, place value and number facts.
- **Addition:**
  - Counting on
  - Using knowledge of number bonds
- **Subtraction:**
  - Taking Away, finding the difference, counting on.

Mathematical Development in the Foundation Phase

- Set of expectations for each year group from Nursery to Year 2
- Applying numeracy skills in all areas of the curriculum
- Applying numerical skills rather than just isolated maths lessons



Next steps…..

Any questions?

Have a look at the web page:

www.barkerslaneprimary.co.uk

www.youcubed.org/visual-math-network

www.iseemaths.com

With thanks to active learn and Gareth Metcalfe

Please complete the questionnaire –
your feedback is important to us!

Diolch yn fawr iawn!