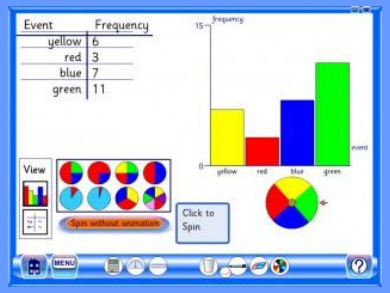
Parent support Group
Spring Term 2014
L.Billington

Maths

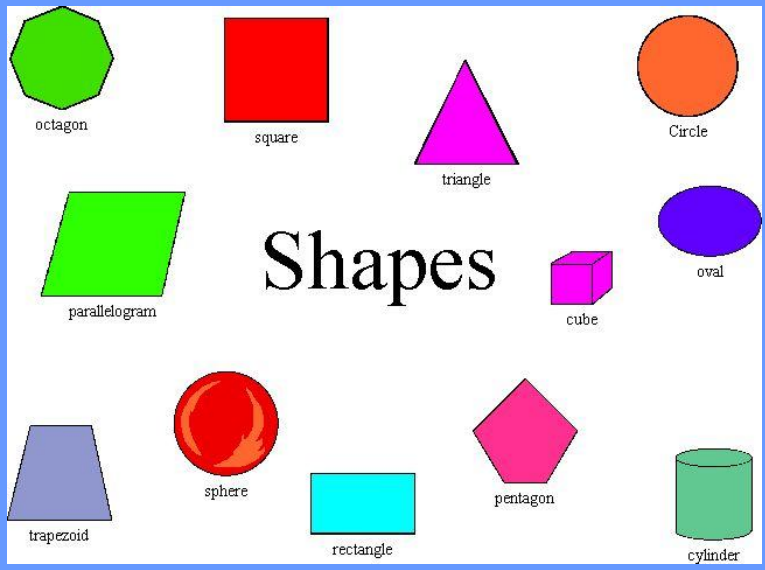
Welcome

- Objectives for this meeting.
- To introduce parents and carers to a quick review of maths taught in school today and show a range of teaching strategies used for working out maths number problems.
- To discuss dyslexia and maths.
- To discuss dyscalculia and maths.
- To give helpful ideas and suggestions to help your child at home with number work.
- Resources and homework.



Maths subjects

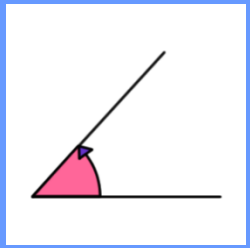
- Within school we aim to give a broad coverage of topics:
- Number and the number system
- Shape space and measure
- Data Handling
- Using and applying



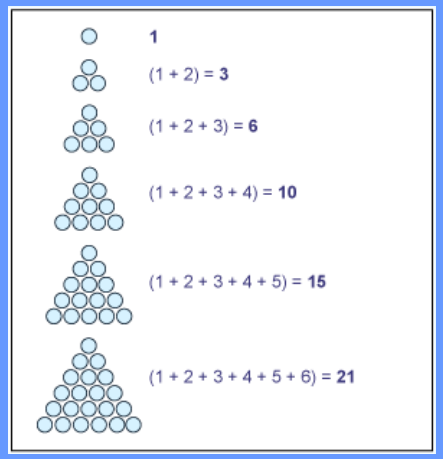
Number and the number system

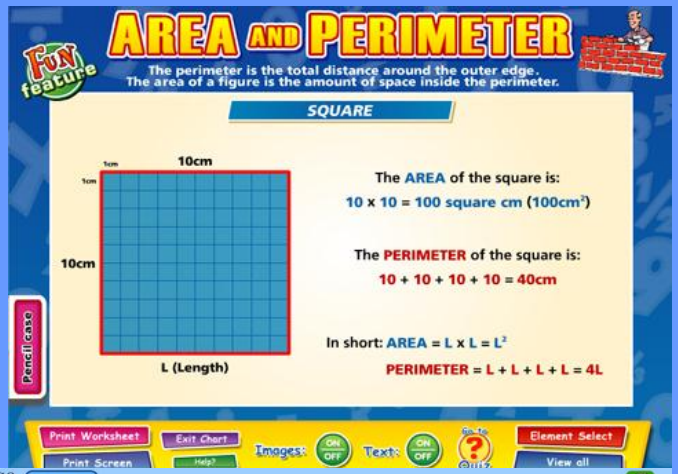
- Number bonds
- Adding 1,2,3 etc subtracting 1,2,3
- Adding several numbers
- Number sequences
- Multiples
- X division + - Four operations

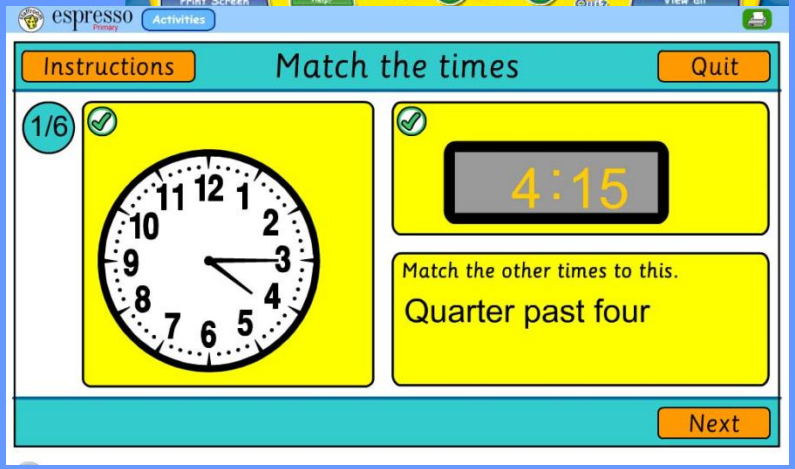
Shape and space

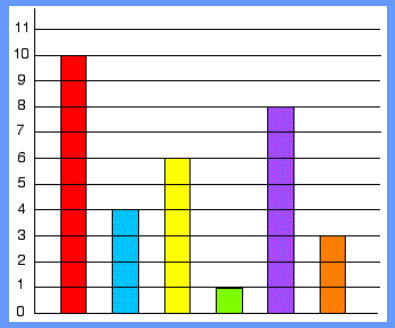


- Knowledge and names of 2d and 3d shape.
- Angles
- Pattern
- Area
- Perimeter
- Measure / Time

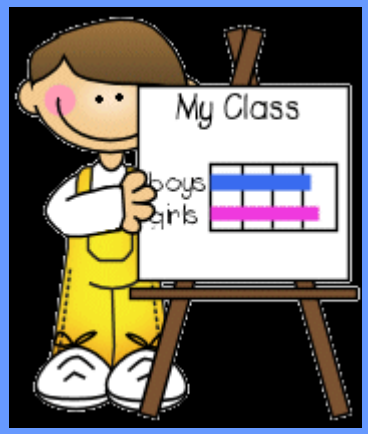






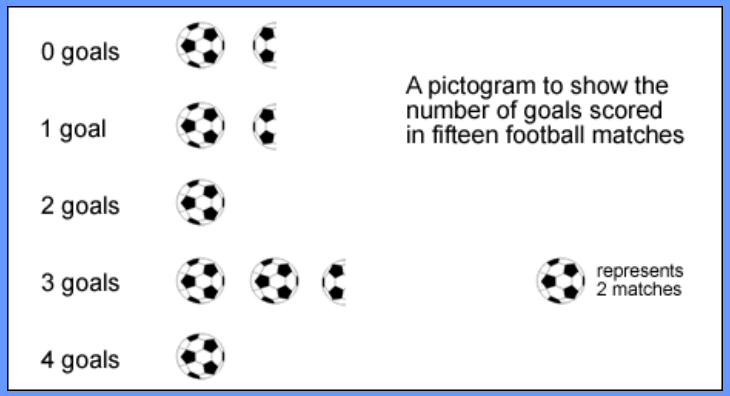


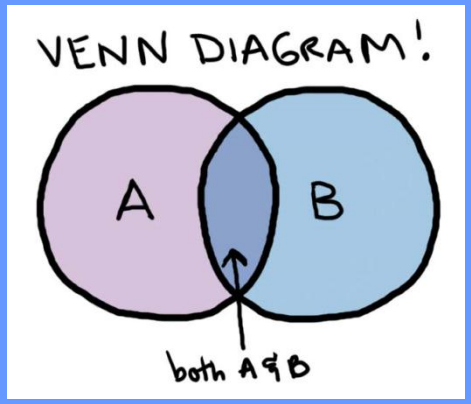
Data handling



Drinks	Votes
Apple Juice	𝍸 𝍸 𝍸
Pepsi	𝍸 𝍸 I
Coke	𝍸 𝍸 𝍸 IIII
Milk	𝍸 𝍸 𝍸 II

- Bar charts
- Tally charts
- Venn diagrams
- Pictograms
- Asking and answering questions about data.





Using and applying

- Mental application
- Questions
- Written problems.
- 1,2,3, step problems using 1 or more operations.

When you were at school!

Generally in main stream schools for addition and subtraction column sums would be demonstrated and used.

```
  HT U
  3 4 5
+2 3 4
  -------
  5 7 9
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Dyslexia

- For children with Dyslexia it can be very hard to work with number. Not all children have difficulties but quite often a short term working memory and difficulty organising data and ordering events can make it difficult to get the right answer.
- Breaking down number problems into clear steps is the answer.

Dyscalculia

- For some children maths presents more of an issue. They lack the intrinsic understanding that a number is related to an amount.
- They cannot see the abstract link between an amount and a symbol.
- Children need a structured approach and lots of overlearning.
- Strategies and pattern, visual aids and practical apparatus to help to construct number.

Partitioning/ Recombining

- **Partitioning** means to *break down a number into its place value parts*
- E.g 45 = 40 + 5
- 123 = 100 + 20 +3
- 3456= 3000 + 400+50+6
- **Recombining** simply means *putting the number back together.*
- 200+60+1= 261
- 4000+500+70+3= 4573

How does this work for addition and subtraction sums.

- By partitioning and recombining numbers children can see a clear correspondence of how a number is made.
- So .. 34+23=
- (30+ 4)+ (20+3)=
- 30 +20=50
- 4+3= 7
- 50+7= 57

30+4 20+3

Subtraction

- Again using partitioning children can subtract numbers and clearly see the effect.

47-32=

(40+7) – (30 +2)

40-30=10

7-2= 5

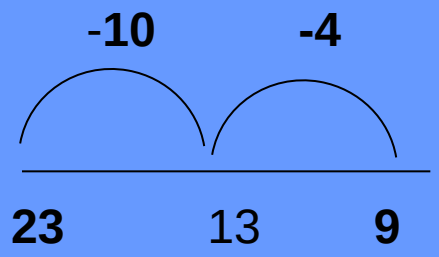
10+5=15

Numberline methods

- Can be used for all four of the mathematical operations: addition subtraction multiplication and division.
- A numberline is used to show an order of working.
- Numberlines are commonly used in all schools today and is probably the most different method to which you used in school.
- All children both in mainstream and special are taught from an early age how to use a numberline.

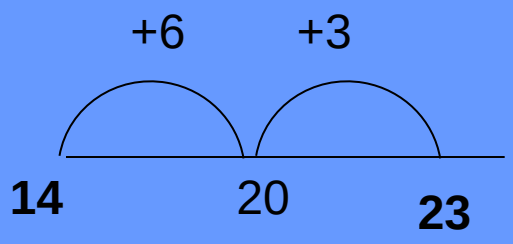
Numberlines

- 23-14=
- For subtraction children will be taught a variety of ways to use one:
- Either
- Begin with the largest number and take off



Subtraction

- Or to begin with the smallest number and count on until you get to the largest.
- 23-14=

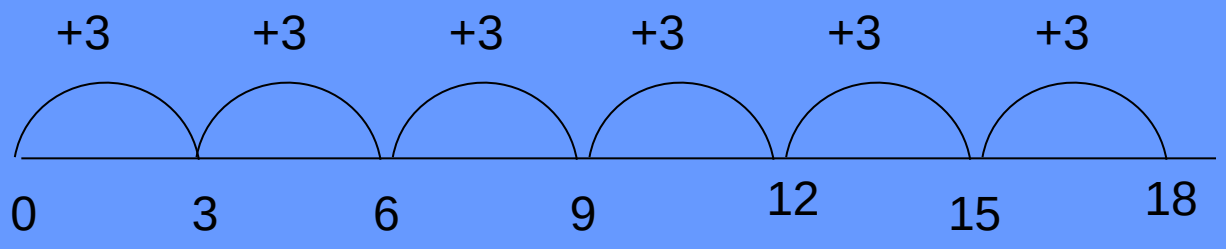


6+3=9

23-14 = **9**

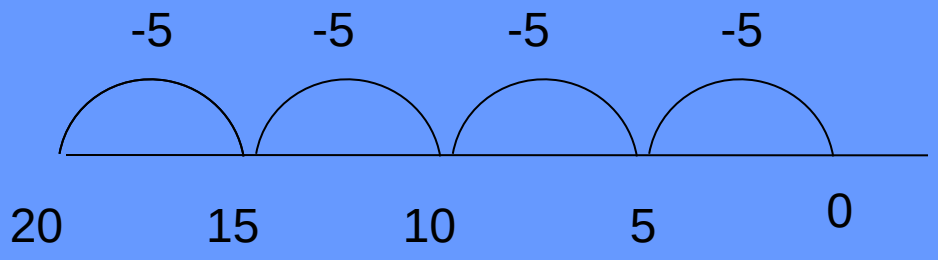
Multiplication

- Is also taught as repeated addition
- It can be shown using a number line.
- 6x3
- Would be taught as 6x3 or 3x6
- 6 sets of 3 or 3 sets of 6



Division

- Division may use terms : share / divide
- Repeated subtraction.
- ‘Chunking’ is a relatively new term to many of you it simply means taking away amounts from a bigger number to work out sets of numbers within a number.
- E.g
- 20 -:- 5=



Division

- We may also say
- ‘ what could you multiply by 5 to get 20?’
- This would help to reinforce the inverse relationship between division and multiplication.

- 20-:-5=4 so 4x5=20

Division

- More complex division can be completed using long division and the bus stop method.

Column addition and subtraction

- These will be used as understanding is developed and progress made. Our aim in class is for the children to know the value of the digits and not just a rote way of adding or subtracting.

Resources

- Number square
- Number arrays
- Number line
- Memory cards
- Practical resources for counting
- Pasta, buttons, pen lids, counters
- Base ten

Games

- Games are a great way to teach and consolidate learning.
- Make it fun
- Self esteem
- Challenge.

Useful websites

- http://www.bbc.co.uk/bitesize/ks1/maths/
- http://www.bbc.co.uk/bitesize/ks2/maths/
- hresources.woodlands-junior.kent.sch.uk/mathsttp:///
- http://www.mathsphere.co.uk/
- http://www.sats-papers.co.uk/sats-papers-ks2.php
- http://www.bbc.co.uk/bitesize/ks2/