Maths Information Evening

Monday, 3rd February

Aims of Presentation

- To give a break down of strategies used when teaching the 4 operations (+,-,x,/).
- To highlight progression of maths throughout Key Stages and how strategies link and develop.
- To give the rationale behind the strategies.
- To explain intervention programs.
- To explain how we make maths ‘real’ and fun in our school.

Early Years Addition

+ Ordering numbers to 20
+ Counting on in one's from a given number
+ Combining 2 groups of objects
+ Numicon

+

Key Stage 1 Addition

+ Beadstrings to 20 and 100
+ Counting on from the biggest number
+ Numberline – counting on
+ Addition on an empty numberline
    + Jump 10, To the 10, Over Jumping
+ Number-bonds to 10
+ Partitioning

Key Stage 2 Addition

- Empty number line (ENL)

Purpose: To provide pupils with a visual model.

It shows the relationship between numbers. It reinforces number order and the process of addition (through jumps).

- Partitioning
- Column addition

Initially simple addition which is extended to carrying numbers when understanding is established.

Early Years Subtraction

- Using a variety of objects—physically removing objects
- Beadstring to 20
- Singing songs
- Verbal problem solving
-Language used: less than, take away
- Smaller group left

Key Stage 1 Subtraction

- Physically solving problems
- Use of number bonds and hearts in love to solve
- Using a beadstring
- Finding the difference by counting on using a numberline
- Numicon

Key Stage 2 Subtraction

- Empty number line
  - Counting on
  - Counting back

- Expanded decomposition

- Column subtraction

Early Years Multiplication

x Entirely practical based

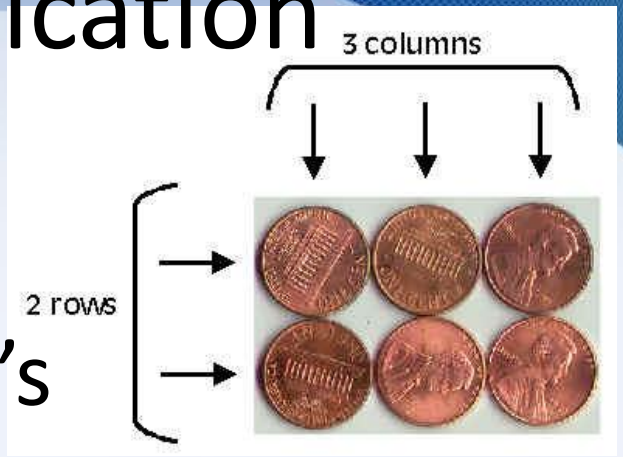
x Counting on in 2's

x Repeated addition

Eg: There are 3 plants, each has two leaves, how many leaves are there?



Key Stage 1 Multiplication



x Use of arrays to explain

x Counting on in 2's, 5's and 10's

x Understanding multiplication as: groups of, lots of and sets of

x Solving problems using repeated addition

eg: 5 x 4 = 5+5+5+5 =

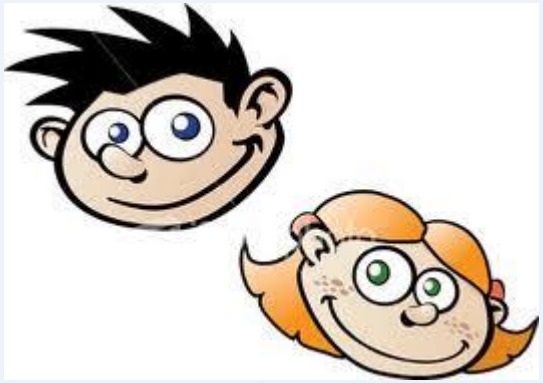
Key Stage 2 Multiplication

- Times table knowledge
- songs, games, chanting, class quizzes, league table.
- Grouping
- Number line – repeated addition
- Partitioning
- Grid method
- Long multiplication

Early Years Division

÷ Entirely practical

÷ Physical problem solving – moving equipment



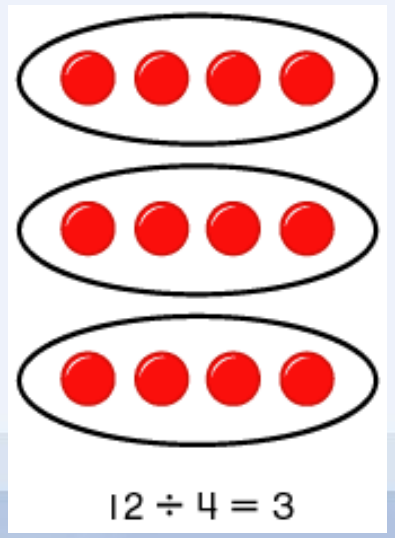
Key Stage 1 Division

÷ Understood as sharing

÷ Progresses from doubling/halving to repeated subtraction using ***Numicon.***

÷ Counting back on a numberline

÷ Arrays



Key Stage 2 Division

- Sharing into groups – recognising remainders
- Chunking – repeated subtraction
- Long division (Bus stop method)

Interventions

- Regular assessment – In-class assessment, end of unit assessment, NFER and optional SATS.
- Personalised targets derived from identified gaps in knowledge.
- Assessment for learning
- Numicon
- Rapid Maths

Topic Maths

- Real World context
- Linked to the class topic and is often cross curricular
- “When are we going to do our maths lesson?”
- Open ended tasks
- Independent learning
- Extends the more able
- Fun!

How can I help my child with maths?