



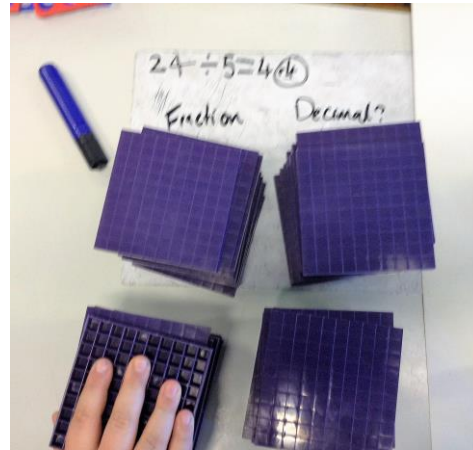
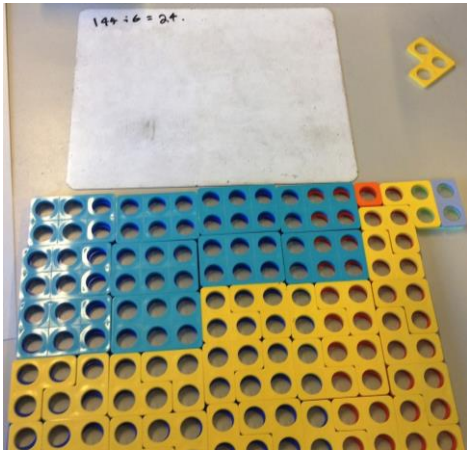
St. Mary and St. Peter

Year Five Calculation

Division

Words we use... division, dividing, divide, divided by, divided into, divisor, left, left over, remainder, grouping, sharing, share, share equally, one each, two each, three each ... ten each, group in pairs, threes ... tens, equal groups of, doubling, halving, array

In Year Five these are some of the ways we explore division



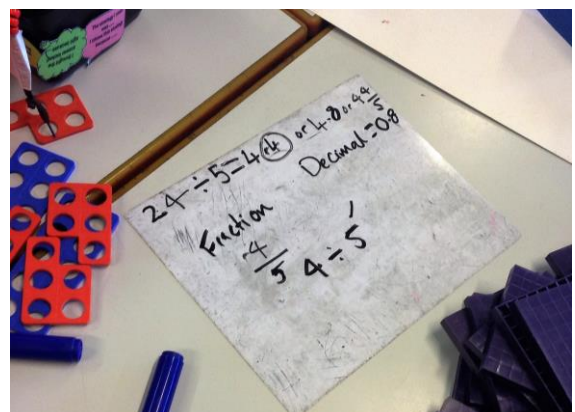
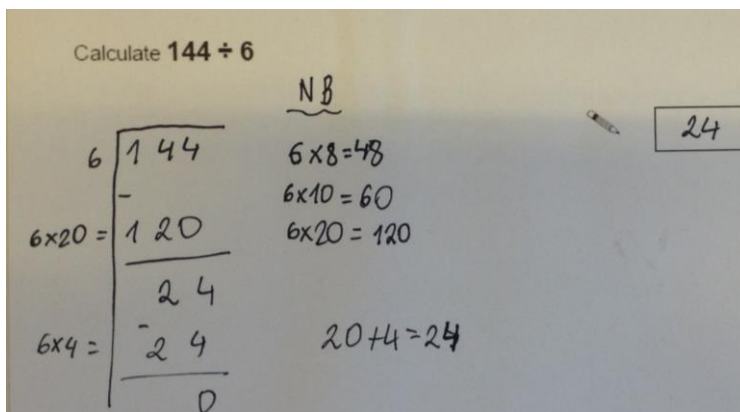
How Year Five learn divide

In Year Five children divide numbers up to 4 digits by a 1 digit whole number using grouping and chunking methods and interpret remainders as whole number remainders, fractions or by rounding as appropriate for the context. They divide whole numbers by 10, 100 and 1000 using place value charts and Denes structured materials to support their understanding.

Division is taught in relation to multiplications and arrays are used to explore how numbers can be partitioned in a variety of ways to aid fluent calculations.

They to carry out calculations involving the four operations and solve problems using all four operations.

In Year Five we use these jottings and methods to solve our division on paper

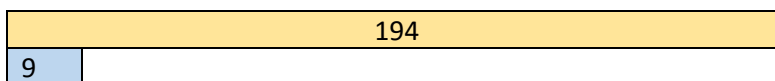


Fluency – this is about building up an understanding of how numbers work. In year 5 we look for children who can use multiplication facts to help solve division problems and can partition numbers in a variety of ways to support solving problems. For example:

Calculate

$68 \div 4 =$

$1248 \div 3 =$



194 pupils are going on a school trip.

One adult is needed for every 9 pupils. How many adults are needed?

Problem Solving - importantly this is about working out ways to explore a problem. Children learn to work in a logical way and try out different ways to come to solutions. It is essential for problem solving that children are resilient and keep going even if they are finding the problem tricky. Here are some examples of Division problems for Year Five.

What do you notice about the remainders?

When 59 is divided by 5, the remainder is ?

When 59 is divided by 4, the remainder is ?

When 59 is divided by 3, the remainder is ?

When 59 is divided by 2, the remainder is ?

Can you find another number that this pattern works for?



I am thinking of a number. When it is divided by 9, the remainder is 3. When it is divided by 2, the remainder is 1. When it is divided by 5, the remainder is 4. What is my number?

Reasoning – is about explaining thinking. Children are asked questions such as: “How do you know?”, “Can you convince me this is true?”, “What do you notice about these numbers?” and “Can you give another example?”

When dividing by 100, I just take two zeros off the end.



Does this work?
Is there a problem with using this method?

The answer to 166 divided by 4 can be written as 46 remainder 2 or as 46.5



Is he correct?
Convince me!

8546 by 5

I know there will be a remainder before I start



Is she correct?
Explain how you know.