

Activities to try at home

Finding areas and perimeters

Perimeter = distance around the edge of a shape

Area of a rectangle = length x breadth (width)

- ◆ Collect 5 or 6 used envelopes of different sizes.
- ◆ Ask your child to estimate the perimeter of each one to the nearest centimetre. Write the estimate on the back.
- ◆ Now measure. Write the estimate next to the measurement.
- ◆ How close did your child get?
- ◆ Now estimate then work out the area of each envelope.
- ◆ Were perimeters or areas easier to estimate? Why?

You could do something similar using an old newspaper, e.g.

- ◆ Work out which page has the biggest area used for photographs.
- ◆ Choose a page and work out the total area of news stories or adverts on that page.

Car numbers

- ◆ Choose a car number.
- ◆ You may add or subtract 10, 20, 30, 40, 50, 60, 70, 80 or 90.
- ◆ Try to get as close as possible to 555.
- ◆ Who can get closest during a week?

How much?

- ◆ While shopping, point out an item costing less than £1.
- ◆ Ask your child to work out in their head the cost of 3 items.
- ◆ Ask them to guess first.
See how close they come.
- ◆ If you see any items labelled, for example, '2 for £3.50', ask them to work out the cost of 1 item for you, and to explain how they got the answer.



Maths at Pensans in Year 5



A booklet for parents

This booklet provides information on the maths taught in Year 5. It also includes End of Year expectations for children in Year 5, as well as ideas and activities to try at home.

National Curriculum Expectations at the end of Year 5

The new National Curriculum is divided into different aspects of maths:

Number and Place Value, Calculations, Fractions, Measurements, Shape, Graphs and Data.

During Year 5 and 6, children to use their knowledge of number bonds and times tables to tackle more complex problems, including larger $\times$ and $\div$, and meeting new material.

In Year 5, this includes more work on calculations with fractions and decimals, and using considerably larger numbers.

Number and Place Value:

- * Recognise and use the place value of digits in numbers up to 1 million (1,000,000)
- * Use negative numbers, including in contexts such as temperature
- * Recognise the place value in 4 digit numbers (1000s, 100s, 10s and 1s)
- * Round any number to the nearest 10, 100, 1000, 10,000 or 100,000
- * Read Roman numerals, including years.

Calculations

- * Carry out addition and subtraction with numbers larger than 4 digits
- * Use rounding to estimate and check answers are reasonable
- * Find factors of multiples of numbers, including common factors
- * Know the prime numbers up to 19 by heart, and find primes up to 100
- * Use the standard methods of long multiplication and short division
- * Recognise square numbers and cube numbers

Factors

Factors are pairs of numbers which multiply to make a product. e.g. 2 and 9 are factors of 18.

Common factors are numbers which are factors of two other numbers, e.g. 3 as a factor of both 6 and 18

Fractions

- * Put fractions with the same denominator into size order
- * Find equivalents of common fractions
- * Convert between improper and mixed fractions e.g. $5/4$ is equal to $1\frac{1}{4}$
- * Add and subtract simple fractions e.g. $\frac{2}{3} + \frac{1}{6} = \frac{5}{6}$
- * Convert decimals to fractions eg $0.71 = \frac{71}{100}$
- * Round decimals to the nearest tenth
- * Order numbers with up to three decimal places
- * Begin to use the % symbol

Fractions

In a fraction, the numerator is the number on top; the denominator is the number on the bottom

Measurements

- * Convert between metric units measures e.g. km to m, or g to kg
- * Use common equivalences for imperial measures e.g. 2.5cm = 1 inch
- * Calculate the area of rectangles using cm^2 or m^2
- * Calculate the area of shapes made up of rectangles
- * Estimate volume and capacity

Shape

- * Estimate and compare angles, and measure the to the nearest degree
- * Know that angles on a straight line add up to 180° and angles around a point add to 360°
- * Use reflection and translation to change the position of a shape

Graphs and Data

- * Read and understand information presented in tables, including timetables
- * Solve problems by finding information for a line graph.

Much of the knowledge in Y5 relies on number facts being easily recalled. Any practise to home to keep these skills sharp will help and certainly be appreciated by your child and their teacher!