

Fun activities to do at home

Mathletics

Your child has a login and password in the front of their reading journals. They can complete set weekly homework and play games against others in school or around the world.

99 Maths Club

Practice sheets to complete on the school website-under School Info tab- See if you and your child can increase your mental arithmetic by competing against each other.

Activities to try at home

- ♦ Play traditional games such as battleships or draughts and chess, it's a great way of exploring coordinates and movement across the coordinates grid.

TV addicts

Ask your child to keep a record of how long he / she watches TV each day for a week. Then ask him / her to do this.

- ♦ Work out the total watching time for the week.
- ♦ Work out the average watching time for a day (that is, the total time divided by 7).

Instead of watching TV, you could ask them to keep a record of time spent eating meals, or playing outdoors, or anything else they do each day. Then work out the daily average.

One million pounds **£1,000,000**

Assume you have £1 000 000 to spend or give away.

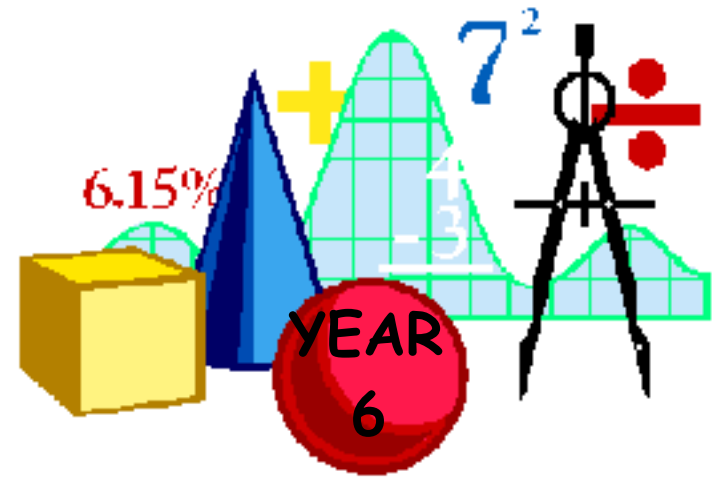
Plan with your child what to do with it, down to the last penny.

Remainders

Draw a 6 x 6 grid.

- ♦ Choose the 7, 8 or 9 times table.
- ♦ Take turns.
- ♦ Roll a dice.
- ♦ Choose a number on the board, e.g. 59. Divide it by the tables number, e.g. 7. If the remainder for $59 \div 7$ is the same as the dice number, you can cover the board number with a counter or coin.
- ♦ The first to get four of their counters in a straight line wins

Maths at Pensans in Year 6



A booklet for parents

This booklet provides information on the maths taught in Year 6 through mastery, including methods of calculation. It also includes End of Year expectations for children in Year 6, as well as ideas and activities to try at home.

End of Key Stage 2 Testing

In May of Year 6, children will take an arithmetic test of 30 minutes, and two broader maths tests of 40 minutes each. These will be sent away for marking with the results coming back at the end of the year. Your child's teacher will also make an assessment of whether or not your child has reached the expected standard by the end of the Key Stage.

National Curriculum Expectations at the end of Year 6

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

Number and Place Value, Calculations, Fractions, Measurements/Geometry, Probability, Statistics and Algebra.

By the end of Year 6, children are expected to be confident with the use of all four standard methods for written calculations, and to have secured their knowledge of the key number facts. Their work will focus more on fractions, ratio, proportion and the introduction of algebra.

Number and Place Value:

- Understand place value for decimals, measures and integers of any size.
- Order positive and negative integers, decimals and fractions
- Know prime numbers, square numbers, factors, multiples and prime factorisation.
- Understand how to round numbers by estimating and then checking answers. (round to decimal places, or a percentage)

Calculations

Addition and subtraction

- Use addition and subtraction confidently (decimals, fractions, integers, positive and negative numbers)
- Use a range of strategies confidently and independently.
- Add and subtract using missing numbers or parts of calculations

Multiplication and division

- Use multiplication and division confidently (decimals, fractions, integers, positive and negative numbers)
- Know relationships between numbers including the inverse.
- Understand how to calculate the square roots of numbers.
- Use mathematical knowledge to explain and reason effectively.

Fractions

- To order decimals and fractions using symbols $<$ $>$
- Know how to calculate fractions of amounts easily and convert these to decimals and percentages.
- Interpret fractions as percentages of operators.
- Convert fractions to decimals and know corresponding fractions and decimals.

Measurements and Geometry

- Calculate problems involving perimeter and area (simple and more complex shapes including circles and some volume)
- To interpret line scale drawings.
- Use a ruler and compass constructions to construct shapes.
- Draw points, lines, parallel and perpendicular lines, angles from a given point.
- Draw translations, rotations and reflections of shapes confidently.
- Calculate angles, missing angles and know the degrees of a shape.
- Solve problems involving the properties of shapes.

Statistics

- Represent statistics using graphs, grouped data and measures such as mean median and mode.
- Construct and interpret; pie charts, diagrams, frequency tables and bar charts.
- Know the relationships between the variables when interpreting data.

Probability

- Record frequency of outcomes and derive simple probability.
- Understand that probabilities of all possible outcomes sum to 1.
- Organise data using diagrams, tables and grids.

Algebra

- Understand how to interpret simple algebraic notation. (See curriculum for more detail)
- Substitute numerical value and calculate simple formulas.
- Work with co-ordinates in all four quadrants.
- Understand simple calculations and find numerical values.

About the targets

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!

