

By the end of the year, your child will be meeting the Year 4 mathematics standard if ...

... they are solving realistic problems using their growing understanding of number, algebra, space, measurement, probability and statistics.

They will be solving problems by using addition, subtraction, familiar multiplication facts and their knowledge of place value.

To meet the standard, your child will be learning to:

- work with larger numbers (up to and beyond 10,000)
- use knowledge of number facts and place value to work with larger numbers and make calculations
- explore equivalent fractions
- make and continue patterns, and explain the rule for the pattern
- use estimation and rounding to check whether calculations are reasonable
- choose how you can best measure length, area, volume, capacity, weight, temperature and time
- use simple maps to show position and direction
- discuss the likelihood that events will happen or will not happen
- pose questions to investigate, then graph and discuss the findings.

FOCUS ON NUMBER

During Year 4 at school, a large part of mathematics teaching time will focus on number learning.

This is a small part of the skills and knowledge your child is learning in order to meet this standard. Talk to the teacher for more information about your child's learning.

MATHEMATICS PROBLEMS AT THIS LEVEL MIGHT LOOK LIKE THIS:

Measure the lengths of the USB, snake and ribbon, using the tape measure. The piece of measuring tape has been torn, but it can still be used for measuring.



I measured the USB and I worked out how many centimetres there were between the numbers on the measuring tape to get the answer.

For the ribbon and snake, I took two measurements on the measuring tape and added them together.

Ask the teacher what your child is doing in mathematics. Talk about how you can work together to support your child's learning.



MATHEMATICS AT HOME

Talk together and have fun with numbers and patterns

Help your child to:

- notice and discuss numbers around the home and in the community – phone numbers, clocks, posters, signs in shops, road signs
- practise counting forwards and backwards from any number up to 10,000 and take turns saying the next number
- play around with large numbers. Find different ways to make large numbers (e.g. 1,000 can be $800 + 200$, $801 + 199$ or $802 + 198$). Name the number that is 10 and 100 more (or less) than any number up to 10,000 (e.g. 10 more than 11 is 21, 100 more than 11 is 111)
- explore patterns through drumming, clapping, stamping, dancing
- find out the ages and birth dates of family and extended family
- see patterns in the numbers in multiplication facts (times tables), e.g. talk about why the product of 4×4 is the same as 2×8 and 8×2 .



Involve your child in easy, everyday activities like these

- Making lunch or a meal for a party – make sandwiches in different shapes. Can they cut their sandwich in half? Can they cut the other sandwich in half a different way?
- Helping at the grocery store – how many apples/bananas weigh a kilo? Look for the best buy between different makes of the same items (e.g. tubs of yoghurt) – check the amount of sugar or salt per serving.
- Telling the time – to the minute, and identifying am and pm time.
- Talking about time duration, e.g. what time to leave to get to school, an appointment or event on time.
- Noticing the cost of car parking and working out how much it would cost for various time periods.
- Reading together – help them look for numbers and mathematical ideas.
- Looking for shapes and numbers in newspapers, magazines, junk mail, art (such as carvings and sculpture), e.g. What shapes can you see? How many _____ do you think there are?

Mathematics is an important part of everyday life and there are lots of ways you can make it fun for your child.

Being positive about mathematics is really important for your child's learning – even if you didn't enjoy it or do well at it yourself at school.

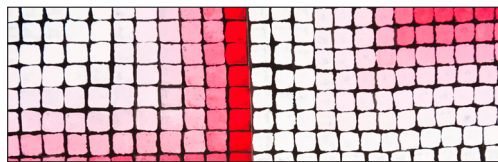


THE WAY YOUR CHILD is learning to solve maths problems may be different from your own experience.

FOR SCHOOL HOLIDAYS/WEEKENDS/RAINY DAYS

Here are some suggestions for what you and your child can do together.

- Play games that use guessing and checking, e.g. pencil and paper games, card games and board games.
- Look at junk mail. What is the best value? Ask your child what they would buy if they had \$10/\$100/\$1000 to spend.
- Work on challenging puzzles, e.g. Sudoku puzzles, crossword puzzles, jigsaw puzzles.
- Cook or bake. Use measuring cups, spoons ($\frac{1}{2}$ and $\frac{1}{4}$ teaspoon) and, if you have them, scales.
- Collect boxes. Flatten them. See if you can make them up again or make them into something else.
- Make paper planes and change their weight so they fly differently. Work out which flies the furthest, and which is the best design.
- Create a repeating pattern to fill up a page or decorate a card.
- Play a maths version of 'I spy' – something that is $\frac{1}{2}$ a km away, something that has 5 parts.
- Hide something from each other and draw a map or hide several clues. Can you follow the map or the clues to find it?
- Jump a skipping rope or do star jumps. How long will it take to jump to 20?
- Bounce a ball. How long will it take to bounce the ball 20 times?



SUPPORT YOUR CHILD

Parents, family and carers like you play a big part in your child's learning every day – you can support and build on what they learn at school.