Mathematics Hub

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FOUNDATION YEAR MATHEMATICS AT SCHOOL: WHAT TO EXPECT

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

... they are solving realistic problems using their growing understanding of number, algebra, space, measurement and statistics. They will be using number names and writing numerals. They will be counting objects and may be describing numbers up to 10 in different ways.

To meet the standard, your child will have been learning to:

- count forwards and backwards by ones, initially from 1 to 10, then to 20 and beyond
- count and order small collections of objects
- think about and describe numbers to 10 in different ways (e.g. 6 is 5 and 1. It is also 4 and 2. It's 1 more than 5 and 1 less than 7)
- sort shapes and objects into common groups, and describe how they sorted them
- ask and answer simple questions to collect information
- give and follow directions such as 'It is in the cupboard', 'It is next to the couch'
- compare length, mass and capacity of objects.

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.

FOCUS ON NUMBER

During the Foundation Year at school, most of the mathematics teaching time will focus on number learning.

MATHEMATICS PROBLEMS AT THIS LEVEL MIGHT LOOK LIKE THIS:

Here are some objects. Sort the objects into groups.
Explain how you worked out the groups.

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

Image credits - Alamy Stock Photo: Elena Gurova; Dmytro Skorobogatov; Danny Smythe; Svetlana Zhukova; Alfio Scisetti; mahir ates; villorejo; Alfio Scisetti; SD

MATHEMATICS AT HOME

Mathematics, like reading, is a skill that is learnt through practice

Talk together and have fun with numbers and patterns. Help your child to do these things:

- Find numbers around your home and neighbourhood. Identify the number (e.g. 'The number on the letter box is 5. That is your age!').
- Compare the size of groups. Ask questions: 'Which group has more? Which group is smaller?'
- Practise sharing collections of items equally.
- Count items in everyday situations (e.g. cups on a table) and think about 'how many' in different ways (e.g. 'There are 1, 2, 3, 4 cups. That's 2 cups plus 2 more').
- Talk about days of the week (e.g. 'Today is Monday. What happens today?').

THE WAY YOUR CHILD is learning to solve maths problems may be different from your own experience. Ask questions. Get your child to show you how they do it and support them in their learning.

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.

Involve your child in easy, everyday activities like these

- Sort things like washing, odd socks, toys and cups while tidying up.
- Share your favourite number with each other and explain why you like that number.
- Model curiosity about numbers of things. Use a 'notice and wonder' routine in everyday situations (e.g. 'I notice a group of people there. I wonder how many there are. Let's count!').
- Notice and talk about shapes and numbers (e.g. 'I wonder how many balls there are. How many do you see?').

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.

FOR SCHOOL HOLIDAYS/WEEKENDS/RAINY DAYS

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

- Practise stacking and building. Access play materials such as blocks at a local toy library.
- Play with cardboard boxes and use words such as 'inside', 'outside', 'in front of', 'behind' and 'next to'. You can find these words and ideas in picture storybooks too. Access these at a local library.
- Play verbal games such as 'I spy something that is longer, bigger, smaller than ...'
- Do jigsaw puzzles together.
- Guess which object is heavier or lighter. Practise comparing.
- Dance to music and sing or clap to favourite songs.
- Talk about time as 'today', 'tomorrow', 'yesterday'. Ask 'What happens next?' when you are doing things.
- Play with water, using containers and measuring cups that have different shapes.

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YEAR 1 MATHEMATICS AT SCHOOL: WHAT TO EXPECT

By the end of the year, your child will be meeting the Year 1 mathematics standard if ...

... they are solving realistic maths problems using their growing understanding of number, algebra, space, measurement and statistics. They are counting and using objects to solve problems. They may be recognising patterns and beginning to connect arithmetic (e.g. 4 + 3 = 7) to mathematical situations.

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

- solve problems that use number skills up to 10, then up to 20
- count forwards and backwards with numbers up to 20, then up to 100, and know the number before and the number after any given number up to 100 or in this range
- explore patterns, shapes and measurement
- organise and count collections of objects in different ways, and share objects into equal groups
- talk about where they are, how they got there and where they are going – 'I am in front of the tree', 'I am behind you'
- connect events and days of the week
- pose questions that involve number (e.g. 'How many do we have? How many chairs do we need?').

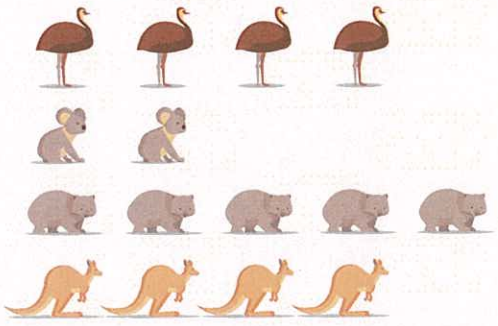
These are just some of the skills and knowledge that will help your child reach the standard. Talk to the teacher for more information about your child's learning.

FOCUS ON NUMBER

During Year 1 at school, a large part of mathematics teaching time is focused on number learning.

MATHEMATICS PROBLEMS AT THIS LEVEL MIGHT LOOK LIKE THIS:

Here are some animal cards. Please arrange them so someone else can see how many of each animal there are. How many kangaroos are there? Which animal is there the most of?



I sorted the animals into rows. There are 4 kangaroos. When I look at each row and count the animals, I see that there are more wombats than any other animal.

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

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MATHEMATICS AT HOME

Mathematics, like reading, is a skill that is learnt through practice

Talk together and have fun with numbers and patterns. Help your child to:

- find numbers around your home and local area – clocks, letterbox numbers, speed signs
- count forwards and backwards together when occasions arise (e.g. microwave count-down, letterbox numbers, counting fingers and toes)
- make clapping patterns when counting
- explore different ways to make numbers to 10 using fingers on both hands (e.g. 4 can be shown as 2 and 2, 3 and 1, 4 and 0)
- connect number to real-life and imaginary stories (e.g. 'You have 2 cats and 2 dogs. I wonder how many animals altogether.')
- look at and make use of a calendar (e.g. notice features and number patterns, use and refer to it often).

Involve your child in easy, everyday activities like these

- Prepare and share out food – 'one for me and one for you'. Ask, 'How many for each person? How many pieces in total will we need to feed everyone?'
- Talk about time – 'lunchtime', 'storytime', 'bedtime'.
- When getting dressed, use words like 'short', 'long', and ask questions like: 'What goes on first?' What goes on next?' 'Does it fit?'
- Ask questions like these: 'How many snacks do we need for lunch?' 'What do you think the weather is going to be like today/ tomorrow?' 'What are we going to do next?'

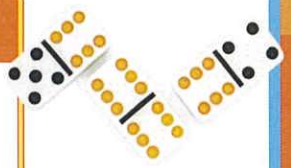
Mathematics is an important part of everyday life and there are many ways you can make it fun for your child.

Use lots of mathematics words while your child is playing ('over', 'under', 'first, second, third', 'round', 'through', 'before', 'after'). This will develop their understanding of early mathematics. Use the language that works best for you and 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.

FOR SCHOOL HOLIDAYS/WEEKENDS/RAINY DAYS



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

- Play with water using containers and measuring cups of different shapes and sizes.
- Cook. Talk to your child about the recipe/ingredients and how much you will need to feed everyone.
- Play shops – decide on a currency system (e.g. leaves, bottle tops, dollars), set up a shop, and buy and sell items. Use language like 'How much is this drawing?' and 'Hmmm I wonder if I have enough leaves to buy that.' Practise counting and checking the amount paid.
- Play games. Play 'I spy something that is longer, bigger, smaller than ...' Play pen and paper games (e.g. noughts-and-crosses, dots and boxes).
- Use maths-related words during play like 'under', 'over', 'between', 'around', 'behind', 'up', 'down', 'heavy', 'light', 'round', 'circle', 'yesterday', 'tomorrow'. You can find these words and ideas in picture storybooks too. Access these at a local library.
- Collect all sorts of 'treasure' – bottle tops, shells, stones, gumnuts, cardboard shapes, leaves. Create or find a box to keep the 'treasure' in. Sort the treasure into different categories and notice how many items are in each group.
- Use maths-related questions during play like 'How many ...?' 'Which is the biggest group?', 'Which is the smallest?' 'How many for each of us?'
- Play with dominoes, dice, a deck of cards, and board games. Do jigsaw puzzles and build with blocks. Access play materials at a local toy library
- For further information check out the families section of the Mathematics Hub.

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.

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YEAR 6 MATHEMATICS AT SCHOOL: WHAT TO EXPECT

By the end of the year, your child will be meeting the Year 6 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 involving several steps and which require them to choose the most appropriate method for the problem. They will be learning a range of approaches to solve problems and will be able to make general statements about numbers and patterns.

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

- solve problems (using +, –, ×, ÷) that require them to choose a logical and efficient method
- solve problems involving the addition and subtraction of fractions
- find the value of a given number in a pattern, and describe the pattern
- measure time and find the area and volume of objects
- convert between common units of measurement such as centimetres and metres
- explain results of investigations by identifying patterns
- experiment to work out the likelihood of an event happening
- find, read and explain data and graphs found in the media.

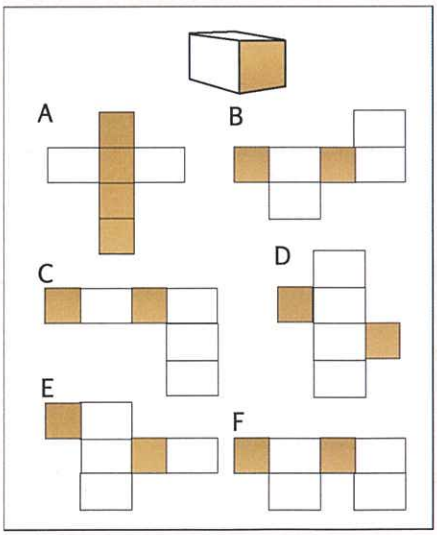
This is a small part of the skills and knowledge your child is learning in order to meet this standard. Talk to the teacher for more information about your child's learning.

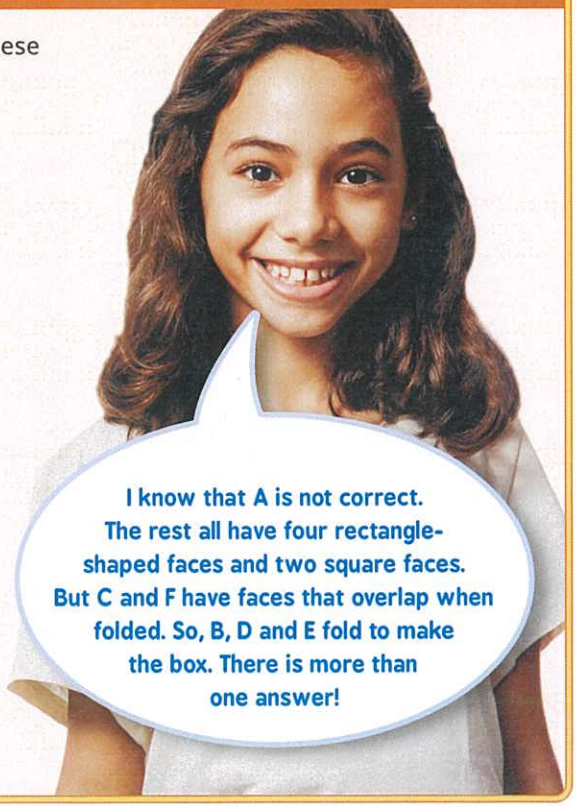
FOCUS ON NUMBER

During Year 6 at school, more than half of mathematics teaching time will focus on number learning.

MATHEMATICS PROBLEMS AT THIS LEVEL MIGHT LOOK LIKE THIS:

Without actually cutting or folding the paper, which of these nets (templates) will fold up to make the box?





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

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MATHEMATICS AT HOME

Talk together and have fun with numbers and patterns

Help your child to:

- count **forwards and backwards**, starting with numbers like these fractions: $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{2}$, $1\frac{1}{4}$
- talk about large numbers around you (e.g. game scores, distances, populations, money amounts, numbers on a calculator)
- talk about the phases of the moon and link these to the best times for fishing or planting
- talk about the patterns in the night sky and the environment – summer and winter, asking, 'What changes? Why?'
- talk about graphs and tables that are in your local newspapers.

Involve your child in easy, everyday activities like these

- Making dinner at home, at camp or for a BBQ. Look at how much of each food item is needed for the people eating. Talk about fractions (one-half, one-quarter, one-third) to calculate how much to cook and cooking times.
- Helping at the supermarket. Look for the best buy between different makes and sizes of the same item (e.g. tissues, packets of flour, cartons of milk).
- Looking at the ingredients in foods – fat, sugar, additives. Decide on the healthiest choice.
- Practising multiplication facts (times tables). Check with your child or their teacher which need practice. For trickier facts, encourage your child to explain how they are sure of the answer. Celebrate logical explanations and precise answers, rather than speed.
- Telling time to the minute, exploring time in 24-hour format and measuring durations of time.

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.

Talk a lot to your child while you are doing things together. Use the language that works best for you and your child.

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 using guessing and checking, e.g. pencil and paper games, card games and board games. Source games and other play materials at a local toy library or second-hand store.
- Cook. Make a pizza, working out who likes what toppings, cooking it, and making sure the pizza is shared fairly. Make a paper or cardboard container to hold a piece of pizza to take for lunch.
- Explore and compare measurements of liquid (e.g. water) using different measuring cups and containers. Explore drink recipes that are made up of different liquid parts (e.g. cordial).
- Make kites using a variety of shapes and materials. How high can each kite go? How long can it fly for?

- Make a family tree showing the number of cousins, aunts and uncles, grandparents and their relationships to you.
- Plan out the holidays. Look at each day's fun time, rest time, digital time, helping time, family time and bedtime.
- Plan to make bead necklaces and friendship bracelets. First look for things at home that you could use. If you need to buy anything, work out how much you need (e.g. the length of stringing material and number of beads) and its cost.

- Play outdoor games or sports such as frisbee, netball, touch rugby, AFL, cricket, soccer, bowls. Include scoring.
- Work on challenging puzzles, e.g. Sudoku puzzles, crossword puzzles, jigsaw puzzles.
- Go on scavenger hunts. Make maps with clues and see who can get to the prizes first.

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.

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YEAR 5 MATHEMATICS AT SCHOOL: WHAT TO EXPECT

By the end of the year, your child will be meeting the Year 5 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 involving several steps, for which they need to choose the most appropriate method to help them solve the problem. They will be using a variety of approaches and explaining how each one works.

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

- choose a suitable method to solve problems (using +, -, x, ÷) and understand that explaining their method aloud is powerful for supporting accuracy
- use familiar number facts to work out unknown facts, e.g. knowing that 10 × 6 = 60 can help you work out 9 × 6 because it will be one 6 less than 60
- connect grouping and sharing (multiplication and division) to find fractions of sets and quantities, e.g. knowing that 4 lots of 5 makes 20 (4 x 5 = 20) or that 20 shared between 4 is 5 (20 ÷ 4 = 5) can help you work out $\frac{1}{4}$ of 20
- recognise two-dimensional shapes in three-dimensional objects
- use grid references on maps to describe the location of objects
- measure the size and capacity of objects
- conduct chance experiments to explore and discuss outcomes that are and are not equally likely
- pose questions to investigate, then graph and discuss the findings.

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.

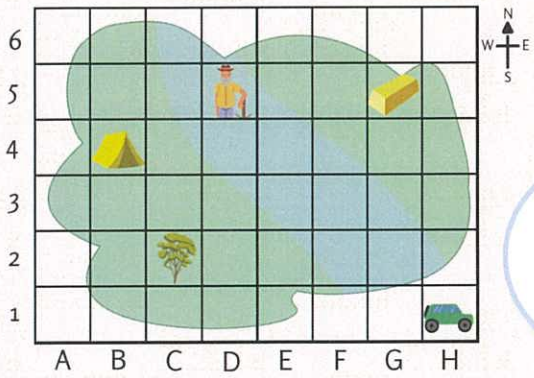
FOCUS ON NUMBER

During Year 5 at school, more than half of mathematics teaching time will focus on number learning.

MATHEMATICS PROBLEMS AT THIS LEVEL MIGHT LOOK LIKE THIS:

Here is a map. What things are at B4 and C2 on the map? What is the location of the gold?

The gold prospector wants to use his compass to get back to his 4WD. In what direction should he go?



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:

- practise counting forwards and backwards from any starting number up to and beyond 10,000 and take turns saying the next number
- read and discuss large numbers as they arise, e.g. prices at a local car yard, road signs with information about how far it is to the next town or city, a car's odometer that shows how far it has travelled
- play around with large numbers. Find different ways to make 100 and 1,000 and notice patterns (e.g. 100 more can be 800 + 200, 801 + 199 or 802 + 198). Name the number that is 10, 100 or 1,000 more (or less) than any number up to 10,000 and look out for patterns e.g. 100 more than 111 is 211, 1,000 more than 111 is 1,111)
- discuss number patterns in the multiplication facts (times tables), e.g. talk about why the product of 3 × 4 is the same as 2 × 6 and 6 × 2
- notice patterns and create your own, e.g. create a secret code using numbers and use it to write messages.

Involve your child in easy, everyday activities like these

- Making and organising lunch or a meal for a social gathering, including equal sharing of fruit, biscuits, sandwiches or drinks.
- Helping at the grocery store. Choose items to weigh. Look for the best buy between different makes of the same items (e.g. breakfast foods, household essentials), including looking at the ingredients and nutritional value per serve.

- Practising multiplication facts (times tables). Check with your child or their teacher which ones would be the best to practise. For trickier facts, encourage them to explain why they are sure of the answer. Do not rush your child. Praise clear, good reasons.
- Telling time to the minute and exploring time in 24-hour format.
- Noticing shapes, numbers and patterns when you are reading together.

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

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

FOR SCHOOL HOLIDAYS/WEEKENDS/RAINY DAYS

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

- Play games using guessing and checking, e.g. pencil and paper games, card games and board games. Source games and other play materials at a local toy library or second hand store.
- Work on challenging puzzles, e.g. Sudoku puzzles, crossword puzzles, jigsaw puzzles.
- Look through junk mail. Find the most expensive and the cheapest item advertised, or tear or cut the junk mail into strips to make a woven mat.
- Make a roster for jobs around the house.
- Plan for a special event on a budget, e.g. afternoon tea for a grandparent or family friend.
- Play outside games such as cricket, netball, basketball, mini-golf, soccer, frisbee.
- Cook or bake. Follow a simple recipe, e.g. for damper, pancakes, scones.
- Find a 3D model or make one, e.g. using blocks that fit together. Draw what it looks like from each side and above. Then draw what your child thinks it looks like from underneath. Once finished, check the underneath of the real object against the drawing.
- Follow simple origami instructions.
- Collect family and friends' birthdays and put them in order. Make a reminder calendar for the year.

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.

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.

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YEAR 3 MATHEMATICS AT SCHOOL: WHAT TO EXPECT

By the end of the year, your child will be meeting the Year 3 mathematics standard if ...

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

They will be solving number problems by breaking up numbers and moving them around without counting. For example, 8 + 5 could become 8 + 2 + 3.

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

- explore patterns in numbers up to 10 000
- use familiar number facts to solve problems
- talk about fractions when sharing and exploring shapes and quantities
- organise objects and talk about what's different and what's the same
- create and describe number patterns
- measure objects and time
- give and follow directions
- talk about the reasons why an event is likely to happen or not
- investigate a topic, collect and display data, and discuss what they have discovered.

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.

FOCUS ON NUMBER

During Year 3 at school, a large part of mathematics teaching time will focus on number learning.

MATHEMATICS PROBLEMS AT THIS LEVEL MIGHT LOOK LIKE THIS:

A nature park has 18 turtles. Another 8 turtles are released into the park.

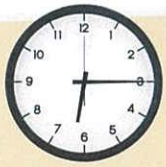
How many turtles are there now at the nature park?

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

iStock.com/Alex Liew

MATHEMATICS AT HOME

Talk together and have fun with numbers and patterns



Help your child to:

- find and connect numbers at the local shops
- name the number that is 10 more or 10 less than a number up to 100
- make patterns when counting in groups (skip counting) forwards and backwards, starting with different numbers (e.g. 13, 23, 33, 43 ..., ...43, 33, 23, 13), and have fun by taking turns to say the next number
- try making different types of patterns by drumming, clapping, stamping, dancing or drawing patterns that repeat
- find out the ages of family and extended family members
- have them try solving addition and subtraction problems to 20 in their heads, e.g. 10 + 4, 15 – 7
- use groups of 10 that add to 100, e.g. 50 + 50, 30 + 70.

Use easy, everyday activities

Involve your child in:

- telling the time – o'clock, half past, quarter to and quarter past.
- learning their multiplication facts (times tables). For trickier facts, encourage them to explain why they are sure of the answer. Celebrate logical explanations and precise answers over speedreading and sharing a book. Ask them questions about numbers in the story – use the number of pages as another way to practise number facts, e.g. How many pages are left?
- doing a shape and number search when you are reading a book or looking at art (like carvings and sculpture), e.g. What shapes can you see?
- helping at the supermarket. Ask your child to get specific items, e.g. a medium-sized tin of pet food, 2 litres of milk, 250 grams of mince or chickpeas.

Talk a lot to your child while you are doing things together. Use the language that works best for you and 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 seem strange. Ask questions. Get your child to show you how they do it and support them in their learning.

FOR SCHOOL HOLIDAYS/WEEKENDS/RAINY DAYS

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

- Play games – board games, pen and paper games; e.g. noughts-and-crosses, dots and boxes, card games and jigsaw puzzles.
- Make your own advertising pamphlet. Cut out and sort images to go on it, make pretend money to spend.
- Grow seeds or sprouts. Measure and record the growth each week.
- Fold and cut out paper dolls and other repeating shapes.
- Trace over repeating patterns.
- Go on a treasure hunt. Make a map with clues. Who can get to the treasure first?

- Dance to music and sing or clap to favourite songs – or each make up a dance sequence and teach the dance to someone else.
- Both take turns closing your eyes and describing how to get from the front gate to the kitchen, from the kitchen to a bedroom, from home to school.
- Do timed activities like counting how many times your child can bounce a ball in a minute.
- Play guess-and-check games. Use different shaped jars. How many beans, buttons, pegs are in the container?

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.

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YEAR 4 MATHEMATICS AT SCHOOL: WHAT TO EXPECT

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.

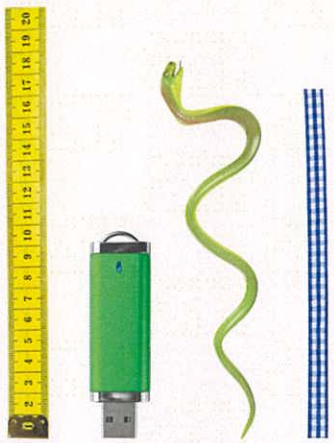
This is a small part of the skills and knowledge your child is learning in order to meet this standard. Talk to the teacher for more information about your child's learning.

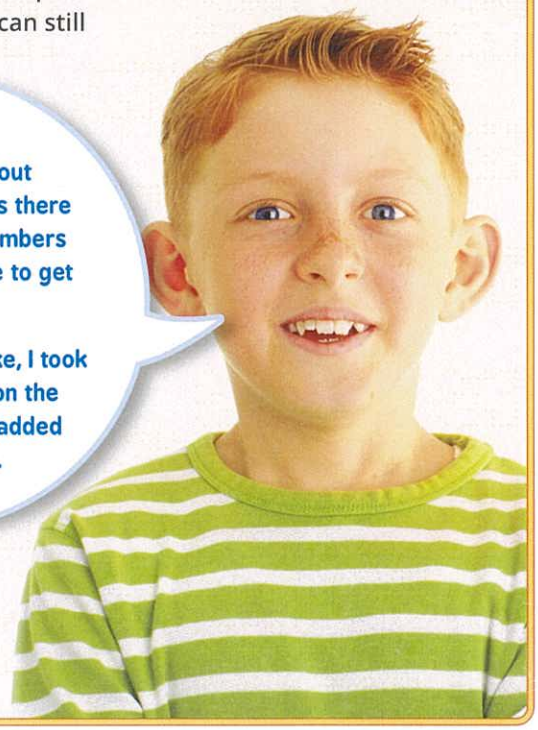
FOCUS ON NUMBER

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

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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.

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

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?

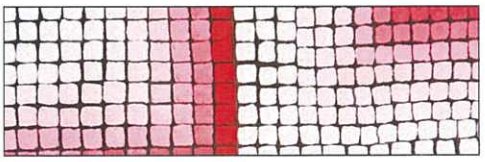
Mathematics is an important part of everyday life and there are lots of ways you can make it fun for your child.

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.

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.

Mathematics Hub

www.mathematicshub.edu.au

YEAR 2 MATHEMATICS AT SCHOOL: WHAT TO EXPECT

By the end of the year, your child will be meeting the Year 2 mathematics standard if ...

... they are solving realistic problems using their growing understanding of number, algebra, geometry, measurement and statistics. They will be exploring increasing and decreasing number patterns such as counting by two from any starting point. They may use their fingers to help them keep track of numbers.

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

- solve addition and subtraction problems using numbers up to 100
- count in 2s, 5s and 10s, forwards and backwards
- find $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{8}$ of simple shapes and collections of objects
- sort objects into common groups and describe what they have done
- ask and answer questions, and display their findings
- give and follow directions
- measure objects using their hands, feet or a pencil.

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.

FOCUS ON NUMBER

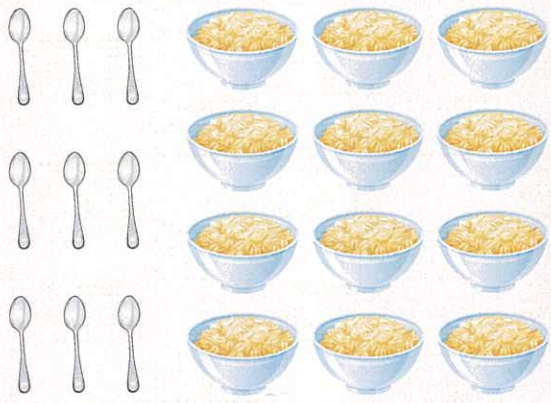
During Year 2 at school, a large part of mathematics teaching time will focus on number learning.

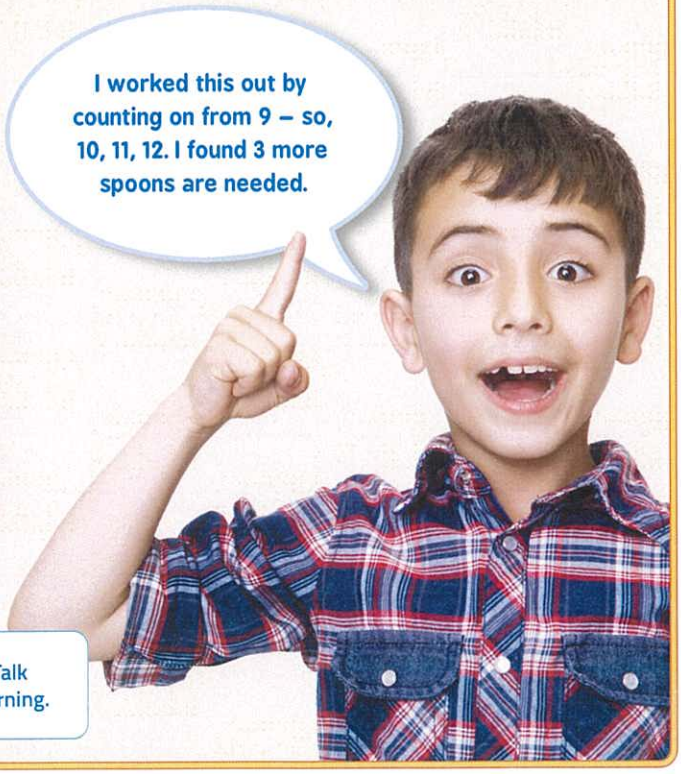
MATHEMATICS PROBLEMS AT THIS LEVEL MIGHT LOOK LIKE THIS:

Imagine there are 9 spoons and 12 bowls.

Each bowl needs a spoon.

For each bowl to have a spoon, how many more spoons are needed?





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

Mathematics, like reading, is a skill that is learnt through practice

Talk together and have fun with numbers and patterns. Help your child to do these things:

- Find numbers around your home and neighbourhood and look for patterns (e.g. 7 on a letterbox, 17 on another and 27 on another).
- Count forwards and backwards starting with different numbers (e.g. 58, 59, 60, 61, 62, then back again), and have fun by taking turns to say the next number. Make patterns when counting forwards and backwards (e.g. 5, 10, 15, 20 then 20, 15, 10, 5 and 30, 40, 50, 60 or 12, 14, 16, 18, 20 ...).
- Solve addition and subtraction problems (e.g. 8 + 4, 16 – 3). Ask your child how they solved the problems (e.g. Did you count forwards or backwards in your head? Did you use your fingers? Did you solve it another way?). Have them try addition and subtraction problems by counting forwards or backwards in their heads (e.g. 8 + 4, 16 – 3).
- Count the number of flowers in a garden, or trees in a park.
- Learn different ways to make 10 (e.g. 6 + 4, 3 + 7).
- Double and halve numbers to 20 (e.g. 7 + 7 is 14, half of 14 is 7).

Use easy, everyday activities

Involve your child in activities like these:

- Sort washing, odd socks, toys, cans, etc. while tidying up.
- Share your favourite numbers with each other and explain why you like each number.
- Read, noticing and talking about numbers of things. Ask questions about the pictures like 'How many birds are there? How do you know? How did you count?'
- Do a shape and number search together wherever you are, e.g. for number of shoes, shapes of doors and windows.

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 seem strange. Ask questions. Get your child to show you how they do it and support them in their learning.

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.

FOR SCHOOL HOLIDAYS/WEEKENDS/RAINY DAYS

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

- Use maths-related words during play (treasure hunts, obstacle courses, building huts from cardboard boxes) – 'inside', 'outside', 'in front of', 'next to', 'behind', 'under', 'over', 'between', 'around', 'up', 'down', 'heavy', 'light', 'round', 'your turn next', 'before', 'after', 'left' and 'right', 'square', 'triangle'. Use the language that works best for you and your child.
- Play 'I spy something that is longer, bigger, smaller than ...', and do pen and paper games (e.g. noughts-and-crosses, dots and boxes and crosswords) and jigsaw puzzles together.
- Play with water using differently shaped containers and measuring cups.
- Cook. Talk to your child about the recipe/ingredients and how much you will need to feed everyone.
- Dance to music and sing or clap to favourite songs.
- Play with a pack of cards. Make up addition and subtraction problems using the numbers 1 to 20.
- Look at a calendar. Ask 'how many days/weeks until [an event]?', 'how many days in the month?', 'how many weekends?' Encourage your child to look for patterns.

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