

Supporting your child with Maths at home

Reception and Key Stage 1
Year 1 to Year 2



Thomas Eaton Primary Academy

Supporting your child at home in Reception

- Choose a number for the week, e.g. 2. Encourage your child to look out for this number all the time. Can your child see the number 2 anywhere? At home - in the kitchen; On pages in a book; In the street - on doors, on car number plates, on buses; While out shopping - on the shop till, on shelves, in shop windows.
- Find two apples, toys, spoons, straws, sweets, etc. Make patterns, such as two knives, two forks, two spoons, two knives, two forks, two spoons... Practise writing the number 2. Choose a different number each week.
- Dice game - Use a 'dotted' dice and write the numbers 1 to 6 on a sheet of paper. Throw the dice. Can your child guess how many dots there are? Check by counting. Ask your child which number on the paper matches the dots on the dice.
- Stick numbers on the fridge - can you find number 8? 12? 17?
- Practise writing numbers on paper, in sand, with paint, in shaving foam etc.
- Hide numbers around the house and challenge them to find them then put them in order.

Counting ideas and putting numbers in order

- Practise chanting the number names. Encourage your child to join in with you. When they are confident, try starting from different numbers - e.g. 4,5,6. Also try counting backwards.
- Give your child the opportunity to count objects (coins, pasta, shapes, buttons etc.) Encourage them to move each object as they count them.
- Count things you cannot touch - window panes, jumps, claps, oranges in a bag.
- Play games that involve counting - eg snakes and ladders, dice games.
- Make mistakes when chanting, counting or ordering numbers. Can your child spot what you have done wrong?
- Chose a 'number of the week' e.g. 5. Practice counting in 5's, up to 5, on from 5, collect groups of 5 items.
- Cut out pictures of animals, or anything else your child is interested in. Label the animals 1 to 5. Shuffle the animals. Put them in order from 1 to 5 (or 1-10 or 1-20 etc.) Remove one animal. Ask your child which number is missing. Repeat with other numbers and more than one missing number. Ask your child to say what number comes before or after a number you choose; which number comes 2 before, 3 after etc.
- One more, one less. For this game you need a dice, a coin and some building blocks or Lego bricks. Take turns to roll the dice. Build a tower with that number of blocks or bricks. Then toss the coin. Heads means take one brick off. Tails means add one on. If you can guess how many bricks there will be after this, you keep them. The first to collect 20 bricks or more wins.

In the street

- Recognising bus numbers
- Number plate hunt. Who can find a 7? Add the numbers up.
- Comparing door numbers



Doing the washing

- Counting in 2s - matching shoes
- Sorting by colour and size.
- Matching/pairing up socks.
- Find four shoes that are different sizes. Can you put them in order?



Time

- What day is it yesterday, today, tomorrow?
- Use timers, phones and clocks to measure short periods of time e.g. time two minutes for brushing teeth.
- Count down 10/ 20 seconds to get to the table/ into bed etc.
- Recognising numbers on the clock. If you cover a number, what number was missing?



Food

- Can you cut your toast into 4 pieces? Can you cut it into triangles?
- Setting the table. Counting the right number of plates etc. How many more do we need?
- Can you make shapes/ patterns out of the knives and forks?
- Helping with the cooking by measuring and counting ingredients.
- Setting the timer.
- Positional language at dinner time: What is on the rice? Where are the carrots?

Going shopping

- Reading price tags
- Counting items into the basket
- Finding and counting coins
- Comparing weights - which is heavier?



Measuring

- Are you taller than a ...?
- Marking height on the wall.
- Cut hand shapes out of paper. How many hands long is the sofa? How long is the table? Who has the biggest hands in our family?
- How many steps from the gate to the front door?
- Let the children pour from one container to another so that they can understand that the volume of liquid does not change, unless some is added or taken away, even though it may change its shape.

Shapes

- Cut a potato into shapes (circles, triangle etc). Use with paint to make pictures and patterns.
- Cut out shapes from coloured paper/ newspaper and arrange into pictures.
- Shape hunt: Can you find a square in your house (windows etc), a circle ...
- Roll a shape - Cut out 12 shapes. Make 3 triangles, 3 squares, 3 rectangles and 3 circles.

Take turns to roll a dice and collect a shape that has that number of sides, e.g. roll a 4, collect a square. The first to have four different shapes wins. If you can name each shape you go first next time!

Games

- Putting cards into piles
- Jigsaws (you can make your own by cutting up a magazine picture)
- Snap (matching pairs) or Happy Families (collect 4 of a kind)
- Snakes and ladders or other simple dice games.
- Adding numbers on two dice.
- Bingo, with numbers or shapes
- Hopscotch



Number rhymes and songs

Eg: 5 little monkeys jumping on the bed
One fell off and bumped his head
Mummy called the doctor and the doctor said
"No more monkeys jumping on the bed!"
4 little monkeys jumping on the bed ...

Supporting your child at home in Key Stage 1

Counting and Place Value - Counting forms an important part of the calculation children have to do every day. With good counting skills, children can add, subtract, multiply and divide.

- Counting on or back in 1s, 10s and 100s from any number
- Going Up and Down Your Stairs - Pick a number for the bottom step. Then count in tens or hundreds going up. Counting in hundreds can be done in grams and millimetres as well. Pick a bigger number for the top step and count backwards as you go down the stairs.
- Counting in regular steps going up or down stairs can help with times tables. What number will we be on when we reach the 6th step? What number is at the top/bottom step? How many steps to reach 15 if we count in 5s? If we count in 200g steps, when will we reach 1kg?
- Car Journeys - Choose the colour of a car. Each time you see a car of your colour, look at the number plate. The person who has seen the largest/smallest number on a number plate is the winner. What is the number on the plate? What is this to the nearest 10 or 100 or 1000? How many more would you need to reach the next multiple of 10, 100 or 1000?
- Disco numbers - Hundreds = Touch your head; Tens = Touch your shoulders; Ones/units = Clap your hands/stamp your feet. So, for 326... Touch your head 3 times, touch your shoulders twice and clap/stamp 6 times.
- Secret numbers - Write the numbers 0 to 20 on a sheet of paper. Ask your child secretly to choose a number on the paper. Then ask him / her some questions to find out what the secret number is, e.g. Is it less than 10? Is it between 10 and 20? Does it have a 5 in it? He / she may answer only yes or no. Once you have guessed the number, it is your turn to choose a number. Your child asks the questions. For an easier game, use numbers up to 10. For a harder game, use only 5 questions, or use bigger numbers.
- Dice game - You need a 1-6 dice, paper and pencil. Take turns. Choose a number between 1 and 10 and write it down. Throw the dice and say the dice number. Work out the difference between the chosen number and the dice number, e.g. if you wrote down a 2 and the dice shows 5, the



difference is 3. You could also draw a number line to help your child to see the difference between the two numbers.

- How old? Start with your child's age. Ask your child: How old will you be when you are 1 year older? How old were you last year? How old will you be 10 years from now? and so on.
- During a week, look outside for 'thirties' numbers, such as 34 or 38, on house doors, number plates, bus stops, etc. How many can you spot? What is the biggest one you can find? Next week, look for 'fifties' numbers, or 'sixties'...

Practicing Number Facts

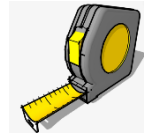
- It's important children learn number bonds to 10 e.g. $4 + 6 = 10$; $3 + 7 = 10$ and number bonds to 20 e.g. $14 + 6 = 20$; $12 + 8 = 20$ by heart.
- Play 'ping pong' to practice components with your child. You say a number and they reply with how much more is needed to make 10, 20, 100 or 1000. Encourage your child to answer quickly without counting or using fingers. E.g. make 100 you shout 40 they shout 60.
- Throw two dice. Ask your child to find the total of the numbers (+), the difference between them (-) or the answer when multiplying the two numbers together (x).
- Use a set of playing cards (without the picture cards). Turn over two cards and ask your child to add or multiply the numbers. If they answer correctly, they keep the cards. How many cards can they collect in two minutes?
- Play 24 with a pack of playing cards using all of them. You need 4 players each puts a card down and first one to make 24 using any or all of the 4 operations and using all or some of the cards. First one to make number keeps all the cards. E.g. you put down a Jack, 2 hearts, 7 spades and 2 clubs. You could say $2 \times$ Jack add 2 hearts.
- Play Bingo. Each player chooses five answers (e.g. numbers to 10 to practice simple addition, multiples of 5 to practice the five times table etc). Ask a question and if a player has the answer, they can cross it off. The winner is the first player to cross off all their answers.
- Give your child an answer. Ask them to write as many number sentences as they can with this answer. You could just ask for addition sentences or any type of calculation.
- Give your child a number fact - e.g. $5 + 8 = 13$. Ask them what else they can find out from this fact - $50 + 80 = 130$, $8 + 5 = 13$, $13 - 8 = 5$, $130 - 50 = 80$ etc.
- Make up rhymes together to help your child remember tricky times tables.
- Rehearse times tables by counting in 'steps' of 2, 5 and 10. Count using silly voices e.g. robot.
- Adding circles - For this game, you need a dice and pencil and paper. Each of you should draw four circles on your piece of paper. Write a different number between 2 and 12 in each circle. Roll the dice twice. Add the two numbers. If the total is one of the numbers in your circles then you may cross it out. The first person to cross out all four circles wins.
- Dicey coins - For this game you need a dice and about twenty 10p coins. Take turns to roll the dice and take that number of 10p coins. Guess how much money this is. Then count aloud in tens to check, e.g. saying ten, twenty, thirty, forty... If you do this correctly you keep one of the 10p pieces. First person to collect £1 wins.
- Speedy pairs to 10 - Make a set of 12 cards showing the numbers 0 to 10, but with two 5s. If you wish, you could use playing cards. Shuffle the cards and give them to your child. Time how long it takes to find all the pairs to 10. Repeat later in the week. See if your child can beat his / her time.
- Circle trios - Draw four circles each on your piece of paper. Write four numbers between 3 and 18, one in each circle. Take turns to roll a dice three times and add the three numbers. If the



total is one of the numbers in your circles then you may cross it out. The first to cross out all four circles wins.

Shape & Measure

- Choose a shape of the week e.g. a square. Look for this shape in the environment. How many of these shapes can your child spot during the week, at home and when you are out? Ask your child to describe the shape to you.
- At home, or when you are out, look at the surface of shapes. Ask your child - what shape is this plate, this mirror, the bath mat, the tea towel, the window, the door, the red traffic light, and so on.
- Play 'guess my shape'. You think of shape. Your child asks questions to try to identify it but you can only answer 'yes' or 'no'.
- Hunt for right angles around your home. Can your child spot angles that are bigger or smaller than a right angle?
- Look for symmetrical objects. Help your child to paint or draw symmetrical pictures/patterns.
- Make a model using different boxes/containers of different sizes. Ask your child to describe their model to you.
- Practise measuring the lengths and heights of objects in metric measurements. Help your child use different rulers or tape measures correctly. Encourage them to estimate before measuring.
- Let your child help with the cooking. Help them to measure ingredients accurately. Talk about what each division on a scale represents.
- Choose some food items out of the cupboard. Try to put the objects in order of weight by feel alone. Then check by looking at the weights on the packets.
- Practise telling the time with your child. Use both digital and analogue clocks. Ask your child to be a 'timekeeper' - e.g. tell me when it is half past four because we are going swimming.
- Use a stop clock to time how long it takes to do everyday tasks -e.g. how long does it take to get dressed. Encourage your child to estimate first.



Real Life Problems

- Go shopping with your child to buy two or three items. Ask them to work out the total amount spent and how much change you will get.
Any opportunity to find value for money gives children experience of money and solving problems. When out and about, getting children to handle money and pay at the counter helps children to count in different ways and make totals in a variety of ways. Things you might ask: How much will we save if we buy 3 for 2? Is it better to buy 2 individual apples or a bag? How much do 2 of these cost? How special is a special offer? Do we save much? For small shopping lists, how much have we spent so far? How much change from £5/£10? How many weeks will it take to save your pocket money if you want to buy that? How many 10p coins do you need to pay for that?
- Shopping gives children the opportunity to spot and name shapes, especially 3-D shapes (e.g. cubes, cylinders, cuboids, spheres, prisms, cones, pyramids etc.).
- Plan an outing during the holidays. Ask your child to think about what time you will need to set off and how much money you will need to take.
- Use a bus or train timetable. Ask your child to work out how long a journey between two places should take. Go on the journey. Do you arrive earlier/later than expected? By how much?

