

Mathematics Nursery and Reception

Sing counting songs and nursery rhymes

Make repeating patterns by singing or clapping

Make repeating patterns with everyday objects – socks, buttons, coins....

Count objects, for example, when laying the table or pegging out washing

Talk about shapes, colours and patterns. Where can you see them?

Match, sort and group objects, for example, socks or toys when tidying up

Look for numbers around the house, for example, door numbers, phone, remote control

Look for similarities and differences, for example, plants in the garden, toys, everyday objects

Compare objects in terms of size and weight – ask which is heavier / lighter / bigger / smaller?

Make play-doh snakes, order them by length. Make a play-doh snails and describe them.

Measure ingredients to make a cake

Plant seeds. How many pots will you need? What size pots? How much water do they need?

Talk about daily routines. What do you do in the morning, afternoon, evening?

Make a model using different shapes. Talk about sizes of objects.

Play snap or pairs with playing cards, dominoes, lotto and bingo

Do jigsaw puzzles and talk about the shapes and patterns

Talk about the weather and the temperature. Is it warm or cold? What should you wear?

Sing counting songs and nursery rhymes

Mathematics Years 1 and 2

Make tessellating patterns with 2D shapes

Count objects or toys into sets or groups – combine the groups and find out how many altogether

Practise counting out loud in different steps – count in 2s, 5s 10s

Measure and weigh ingredients to make a cake. Time the cake in the oven.

Time yourself. How many times can you hop, write your name or say the alphabet in a minute?

Make a junk model using different 3D shapes

Make pancakes or cupcakes – split them into equal portions. Can you find a half? A quarter?

Compare weights and volumes of different food containers, cartons and packets

Help with shopping, look for best bargains. Look at the values on coins. How can you make £1?

Look at maps. How far away are different places? Where would you like to go?

Look at the time when you are doing different activities. How long do they take?

Make an obstacle course or a treasure hunt in the house or the garden. Give directions

Talk about the weather and the temperature. Is it warm or cold? What about in other countries?

Play snap or pairs with playing cards. Make totals with the cards. Can you make exactly 15?

Roll 2 or 3 dice and add the numbers. Does it matter in which order you add them?

Play dominoes, bingo, lotto, board games and jigsaws.

Mathematics

Years 3 and 4

Where do you see mathematics everyday? Look out of your window. What shapes, colours and patterns do you see? Are there patterns on your garden wall or fence? How high is the fence?

Are there any right angles or lines of symmetry? Estimate the area and perimeter of your garden.

Learn a new card game. Teach it to someone else. Turn cards to make exactly 21 – you lose if your cards total more than 21. What is a good number to stop at? Why?

Throw 2 or 3 dice. Multiply the numbers. Does it matter in which order you do this? Why? How many different combinations can you make

What time do you wake up? What about get up? What fraction of your day are you awake / asleep? Keep a diary of what you do and when you do it. Can you work out how long you spend on different activities? What is it as a fraction?

Compare weights and volumes of different food containers, bottles, cartons and packets. What units of measurement are used? Follow a recipe to bake a cake. Is the recipe suitable for your family? How can you make sure you have enough ingredients? Help with shopping, compare prices and look for best bargains. Which supermarket is

Make tessellating patterns with 2D shapes. Do all shapes tessellate? Why? Can you find any examples of tessellating shapes around your house? What about in the garden? Does a shape need to have straight edges to tessellate? Can you find examples of tessellation in different buildings?

Look at a world map or atlas. Where would you like to go? How would you get there? How long would it take? What is the time difference? What is the currency? What is the population? In what direction is the country from your home? What is the flag? What is the capital city? Is it in the northern or southern

Mathematics

Years 5 and 6

Where do you see mathematics everyday? Look out of your window. Can you see obtuse, acute or reflex angles? Are there any parallel or perpendicular lines? Approximately what fraction of your garden is grass, patio, decking? What is this as a percentage? Design your own garden to scale.

Learn a new card game. Teach it to someone else. What is the most likely total if you throw 2 dice and add up the numbers? Why? What is the least likely total? Why? How can you show this? Can you make a table or a chart? How can you make sure you've found all the possibilities?

What time do you go to sleep? When do you wake up? Over 24 hours what fraction of your time is spent asleep? What is this as a percentage? Keep a diary of daily activities. How long is this over a week? What fraction / percentage of time is spent on each activity?

Compare weights and volumes of different food containers, bottles, cartons and packets. Help with shopping, compare prices and look for best bargains. Which supermarket is the best value? Do delivery prices differ at different times of day? Why? Follow a recipe. Can you scale the recipe up or down to make sure you have enough

How many squares are on a chess board? How can you be sure you've counted them all? Can you use letters, numbers and symbols to make a secret code? If you always had the same number of birthday presents each year as your age how many presents would you have had by now? What about your friends and family?

Look at a world map or atlas. Where would you like to go? How would you get there? What is the cheapest way to travel there? Is it the quickest way? Can you find a grid reference for the capital city? What percentage of the population live in the capital city? What is the time difference? Estimate the area of the country. What is the