

## Maths activities

**Place value** - If you are out for a walk look at the house numbers. Which number represents the number of tens? Number of ones? Are they going up or down? How do you know? Do you notice anything about the numbers? Are they going up in 2s for example?

Draw 2 squares on a piece of paper, roll a dice and decide which square to put the number in to make the biggest number. E.g if you rolled a 6 1<sup>st</sup> you would put it in the 10s square because you can't get a bigger number. If you rolled a 2 1<sup>st</sup> you would put it in the ones column as it is one of the smaller numbers. You could then do the smallest number/an even number/an odd number. Extend to a 3 digit number for a challenge.

Think of a number between 1 and 20/50/100. They are only allowed to ask questions that you can answer yes/no. e.g. is your number even? Is your number more than 25? Is it in the 10 times table? Challenge - they can only ask 1 question of the same type e.g. if they ask if your number has 5 tens they can't then ask does it have 3 tens?

**Number bonds to 10/20** - write the numbers 0-10/20 on pieces of paper and turn them over. Take it in turns to turn 2 pieces over. If they add up to 10/20 you keep the pair. Who can get the most pairs?

Say a number and they have to do the number bond to 10/20 using an activity of your choice e.g. if you say 6 they have to do 4/14 star jumps, if you say 9 they have to do 11 hops...

Use a pack of cards but only use cards 1-9. Play snap but you're not looking for pairs you're looking for number bonds to 10.

**Adding/subtracting** - play board games with each other such as snakes and ladders. Can they work out what space they will be on before they move their counter?

If you are out for a walk pick a house number/number on a car reg and ask what the number would be if you added/subtracted a certain amount. Start with 1 digit and move on to 2 digit if they want a challenge.

If you have anything you could use as skittles (plastic bottles, tin cans etc) you could put numbers on them - the children roll the ball and they have to add up the 'skittles' they knock down.

If you have anything you could make circles out of (e.g. hoops or draw circles on the floor with chalk) you could throw an object (ball, beanbag etc) or roll marbles/balls 3

times and add up the scores. Closest could be 5 points, next circle 10 and the last one 15 points.

Each write down 4 numbers between 3 and 18. Take it in turn to roll the dice 3 times and add up the amounts. If you have the total on your paper cross it off. Who can cross the 4 numbers off first?

Start with a pile of objects in the middle (beads, pebbles, lego blocks etc), roll a dice and take away that amount. How many are there now? Keep alternating until you have taken all the objects. The winner is the person who takes the last one.

**Multiplication/division** - find some objects (pennies, toys, lego blocks etc) and ask them to put them in to groups of 2,3,5, or 10. Can we organise them in a different way/. 12 objects - 6 groups of 2, 2 groups of 6, 3 group of 4, 4 groups of 3, 1 group of 12, 12 groups of 1.

Draw numbers on the patio or on pieces of paper on the floor in the 2/3/5/10 times table and get them to jump on the numbers in order and say the number. They could do the reverse and count backwards as well.

Play Fizz Buzz - decide on the multiples you want to say Fizz and Buzz instead of - e.g. multiples of 3 = Fizz and multiples of 5 = Buzz so it goes 1, 2, fizz, 4, buzz, fizz, 7, 8, fizz, buzz, 11, fizz, 13, 14, fizz buzz. Alternatively count in multiples of a chosen number but use fizz and buzz for numbers with a certain number in e.g. counting in 2s and numbers with a 2 in = fizz, numbers with a 6 in = buzz so it would go fizz, 4, buzz, 8, 10, fizz, 14

Find a flower and count the petals. How many petals would there be on 2 flowers? 5? 10? Find an insect - count how many legs - how many on 2/5/10? Challenge - how many on 3?

Ask your child to find objects that would have a specific total e.g. get some of your teddies so there are 10 eyes altogether.

**Multiplication, division, addition, subtraction** - Countdown. Give them a target number and 6 numbers. The children can add, subtract, multiply and divide but they can only use the numbers once. Challenge - give them a time limit, make the number bigger/harder to get. Alternatively use a pack of cards to select the numbers and royals count as 10, ace counts as 1.

Write some questions around the edge of a piece of cardboard and the answers on clothes pegs. Can the children clip the answer to the correct question?

Play scrabble - children have to add up the total of their word. They'll need to multiply by 2 if they land on a double letter/word and multiply by 3 if they land on a triple letter/word.

Bingo - get children to pick 6 numbers from 12 options you give them and put them into a 2x3 bingo grid. Ask them addition, subtraction, multiplication or division questions and if they have the answer in their bingo grid they cross it off. If they get a line of 3 they get a point, if they get a full house they get 2 points.

**Measurement** - If you do any baking/cooking involve your child in weighing out the ingredients.

Ask them to find objects of certain lengths in your house/outside. Make sure they start from the 0 on the ruler. Can they find multiple objects to add up to a certain length? E.g. 2 books that are 40cm long in total.

Keep a daily record of what the temperature is outside. How was it different to yesterday? When was the warmest/coldest day?

Children use different liquids to make a 'potion'. Get them to measure how much they use of each liquid.

If your child has a drink from a bottle look at how much there is to start with. After they've had a drink from it get them to estimate how much they've drunk/how much do they think is left?

**Money** - set up a shop. Give prices for different objects - food, toys etc. Give them a limit. What would they like to buy? You could link this to fractions as well by saying if all the items are half price how much would they be? As well as this you could practice doubling by saying you want 2 of the items.

Can they count how much is in a purse/wallet/piggy bank?

Ask children to make a certain amount from a selection of coins. Include some amounts that they can't make.

**Telling the time to 5min** - ask your child throughout the day at random times what the time is. Ask them questions such as if we play for an hour, what time will it be when we stop? If we went out at 2.30 and it's now 3.00 how long were we out for?

Make a clock using pebbles for the outside and for the numbers. Use a short stick and long stick for the hands. Ask the children to make different times on the clock.

Write down times in 2 different ways e.g half past 1 and 1:30 Can the children match up the times? You could then play pairs with the paper turned over and turning 2 over at a time. If you get a pair keep them.

**Position and direction** - create an obstacle course or think of a place in the house you want to direct them to. Direct child using vocabulary such as anti-clockwise, clockwise, quarter turn, half turn, three quarter turn. Swap over. Challenge - blindfold the person moving.

Look for patterns in the house/outside. Draw them.

Get children to find objects and create their own pattern. E.g. pebble, flower, pebble flower. Stick, stick, stick, leaf, stick, stick, stick, leaf.

Ask children to design something with patterns on e.g. clothes, a plant pot, an easter egg.

**Statistics** - Ask your child a question e.g. how many flowers are there of each colour in your garden? How many flowers did you find in total? Children could use a tally to record their answers then show the results in a table, pictogram (this could be drawn or use objects on the floor) or a graph. Ask questions such as what colour were most flowers? Children could then pick their own question.

Children could record the number of red/blue/white cars that go past the window.

Find a page or book and keep a tally of how many of each letter there are.

**Shape** - take it in turns to think of a 2D/3D shape. The other person can only ask questions that you can answer yes/no. E.g. Does it have 3 sides? Does it have any rectangular shaped faces?

What everyday objects can you find that are a certain shape? E.g. ball = sphere, cereal box = cuboid.

Can children make a shape with their bodies (will need 2 people) e.g sitting with straight legs, straight back and straight arms opposite someone else to make a rectangle.

Give them a piece of string and ask them to make different 2d shapes with it.

**Fractions** - if you have pizza, cake, fruit etc cut it into  $\frac{1}{2}$   $\frac{1}{4}$   $\frac{1}{3}$  Discuss how each part needs to be equal to be fair. Compare  $\frac{2}{4}$  and  $\frac{1}{2}$  what do they notice?

Put 5 objects down in a line in the garden, an equal distance apart. They start at the 1<sup>st</sup> object. Give them instructions e.g walk  $\frac{1}{4}$  of the way, jump  $\frac{1}{4}$  of the way, skip  $\frac{1}{2}$  of the way.

Get some objects (pebbles, toys, sweets) split them in to  $\frac{1}{2}$   $\frac{1}{4}$   $1/3$  - link it to division e.g finding  $\frac{1}{2}$  is the same as dividing by 2.