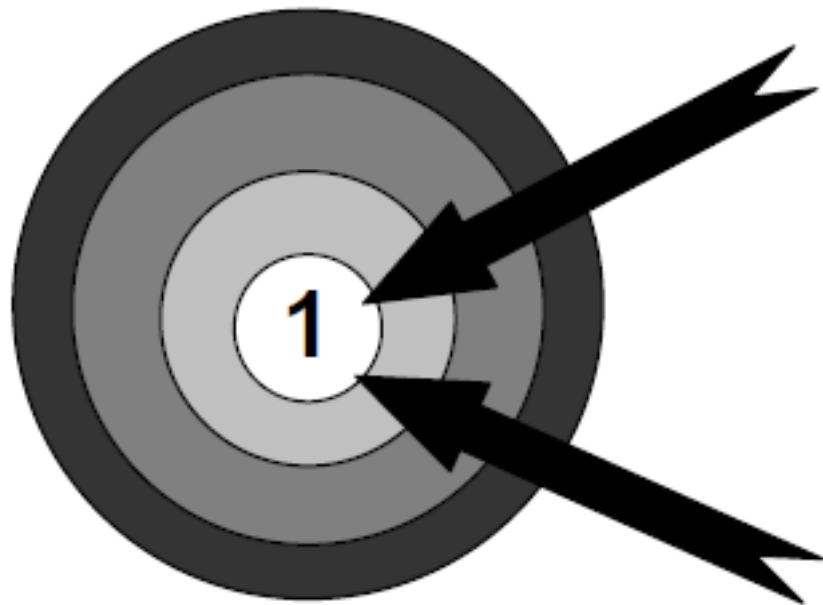


Supporting your child at home

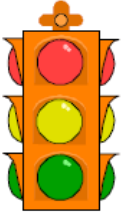


Mathematics

A booklet for parents

KS1

Fun activities to do at home



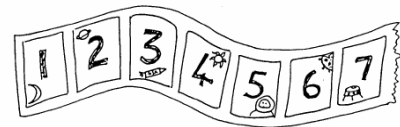
Shape activity

- 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.
- Choose a shape for the week, e.g. a square.
 - How many of these shapes can your child spot during the week, at home and when you are out?

Track games

Make a number track to 20, or longer. Make it relevant to your child's interests – sea world, space, monsters... Then play games on it.

- Throw a dice.
- Move along that number of spaces. BUT before you move, you must work out what number you will land on.
- If you are wrong, you don't move!
- The winner is the first to land exactly on 20.
- Now play going backwards to 1.
- Throw a dice.
- Find a number on the track that goes with the number thrown to make either 10 or 20.
- Put a counter on it, e.g. you throw a '4' and put a counter on either 6 or 16.
- If someone else's counter is there already, you may replace it with yours! The winner is the first person to have a counter on 8 different numbers.



Secret numbers

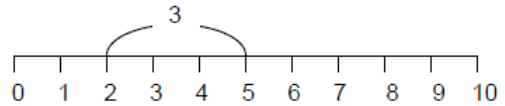
- Write the numbers 0 to 20 on a sheet of paper.
- Ask your child to choose but keep it to themselves.
- Then ask him / her some questions to find out what the secret number is, e.g.
 - Is it less than 10?
 - Is it between 10 and 20?
 - Does it have a 5 in it?
- He / she may answer only yes or no.
- 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.

0123456789

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.

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...*
- If you do this correctly you keep one of the 10p pieces.
- First person to collect £1 wins.

Don't forget to give the coins back!

Cupboard maths

Choose two tins or packets from your food cupboard.

- Ask your child to hold one in each hand and tell you which is heavier, and which is lighter. (Check by reading the weight on each tin or packet.)
- If he / she is right, they keep the lighter one. Then choose another item from the cupboard, trying to find one that is lighter still.
- Carry on until your child has found the lightest item in the cupboard. It might be suitable to eat as a prize!

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.



Out and about

- On the way to school, see how many cuboids, spheres and cylinders you can spot. Which did you see most of?
- During a week, look outside for 'thirties' numbers, such as 34 or 38, on house number plates, bus stops, etc. How many can you spot? What is the biggest or find?
- Next week, look for 'fifties' numbers, or 'sixties'...



31 39 36 35 33

Housey, housey

- When walking down the street with your child, look at house numbers.
- These will probably be following a pattern of either odd or even numbers.
- Can your child predict what number will be on the next house?
- Talk about the pattern.

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.

Takings

For this game you will need a dice and a collection of small things such as Lego bricks, sticky shapes or dried pasta. You will also need pencil and paper.

- Take turns.
- Roll a dice. Take that number of pieces of pasta. Write down the number.
- Keep rolling the dice and taking that number of pieces of pasta. BUT, before you take them, you must write down your new total.
- You can only take your pieces of pasta if you are right.
- The first person to collect 20 beans wins!

For example, Sally has 7. She throws 4. She has to work out how many she will have now. She starts counting from seven: *eight, nine, ten, eleven*. She writes 11.

How heavy?

You will need some kitchen scales that can weigh things in kilograms.

- Ask your child to find something that weighs close to 1 kilogram.
- Can he / she find something that weighs exactly 1 kilogram?
- Find some things that weigh about half a kilogram.

How much?

Once a week, tip out the small change from a purse. Count it with your child.



Counting

Practise counting.

- Start at 5, and count on from there to 11.
- Start at 9, count back from there to zero.

Choose a different starting number each time.

Number facts

You need a 1–6 dice.

- Take turns. Roll the dice. See how quickly you can say the number that you would need to add to the number on the dice to make 10, e.g.



and 6

- If you are right, you score a point.
- The first to get 10 points wins.

You can extend this activity by making the two numbers add up to 20, or 50.

Board Games

Make a board like this.

The numbers are arranged differently from usual, but the games will still work if you use a normal snakes and ladders board.

Pasta subtraction

For this game you need a dice and some dried pasta or buttons.

- Start with a pile of pasta in the middle. Count the pieces.
- Throw a dice. Say how many pieces of pasta will be left if you subtract that number.
- Then take the pieces of pasta away and check if you were right!
- Keep playing.
- The person to take the last piece wins!



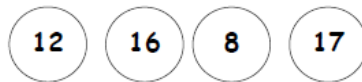
Shopping maths

After you have been shopping, choose 6 different items each costing less than £1. Make a price label for each one, e.g. 39p, 78p. Shuffle the labels. Then ask your child to do one or more of these.

- Place the labels in order, starting with the lowest.
- Say which price is an odd number and which is an even number.
- Add 9p to each price in their head.
- Take 20p from each price in their head.
- Say which coins to use to pay exactly for each item.
- Choose any two of the items, and find their total cost.
- Work out the change from £1 for each item.

Circle trios

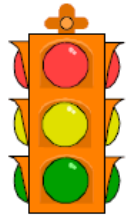
Draw four circles each on your piece of paper. Write four numbers between 3 and 18, one in each circle.



- 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 activity

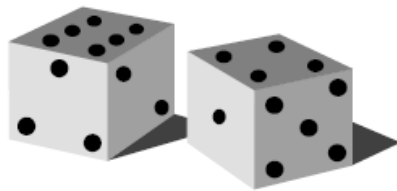
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 - Ask your child – what shape is this plate, this mirror, the bath mat, the tea t the window, the door, the red traffic light, and so on.
- Choose a shape for the week, e.g. a square.
 - How many of these shapes can your child spot during the week, at home and when you are out?



Make 20

For this game you need to write out numbers 0 to 20 on a piece of paper. Make them big enough to put counters or coins on.

- Take turns.
- Roll a dice.
- Put a coin on the number that goes with the dice number to make 20, e.g. throw a '4' and put a coin on 16.
- If someone else's counter is there already, replace it with yours!
- The first person to have counters on 6 different numbers wins.



Pasta race

You need two dice and a pile of dried pasta.

- Take turns to roll the two dice.
- Multiply the two numbers and call out the answer.
- If you are right, you win a piece of pasta.
- The first to get 10 pieces of pasta wins.

