

Maths Targets for pupils in Year 1



A booklet for parents

Help your child with mathematics

**For additional information on the agreed calculation methods,
please see the school website.**

ABOUT THE TARGETS

These targets illustrate what **most** children will have been taught by the **end of** Year 1. However, some children may need consolidation of earlier objectives, therefore greater focus will be given to these. Some children will have exceeded these targets, and will be working to more challenging objectives.

THE TARGETS

Number - number and place value

- count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s
- given a number, identify 1 more and 1 less
- identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least
- read and write numbers from 1 to 20 in numerals and words

Number - addition and subtraction

- read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs
- represent and use number bonds and related subtraction facts within 20
- add and subtract one-digit and two-digit numbers to 20, including 0
- solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$

Number - multiplication and division

- solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher

Number - fractions

- recognise, find and name a half as 1 of 2 equal parts of an object, shape or quantity
- recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity

Measurement

- compare, describe and solve practical problems for:
 - lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]
 - mass/weight [for example, heavy/light, heavier than, lighter than]

- capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]
 - time [for example, quicker, slower, earlier, later]
- measure and begin to record the following:
 - lengths and heights
 - mass/weight
 - capacity and volume
 - time (hours, minutes, seconds)
 - recognise and know the value of different denominations of coins and notes
 - sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]
- recognise and use language relating to dates, including days of the week, weeks, months and years
- tell the time to the hour and half past the hour and draw the hands on a clock face to show these times

Geometry - properties of shapes

- recognise and name common 2-D and 3-D shapes, including:
 - 2-D shapes [for example, rectangles (including squares), circles and triangles]
 - 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]

Geometry - position and direction

- describe position, direction and movement, including whole, half, quarter and three-quarter turns

Parents play a vital role in children’s mathematical development. Many key mathematical skills can be supported at home through everyday activities such as:

- Telling the time
- Weighing for cooking
- Measuring for craft and DIY
- Using money and playing board games.

Many of these skills are the “real-life” maths that we use every day, and are more effectively learned in the setting in which we use them.

Fun activities to do at home

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.
- Don't forget to give the coins back!

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.

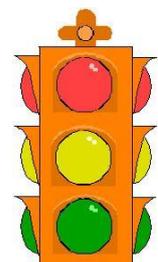
For an easier game, use numbers up to 10. For a harder game, use only 5 questions, or use bigger numbers.

0123456789

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.



Fractions

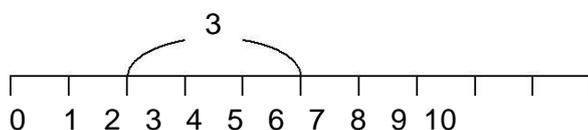
Use food to illustrate halves and quarters, e.g. pizzas, cakes, etc.

Dice game

You need a 1–6 dice, paper and pencil.

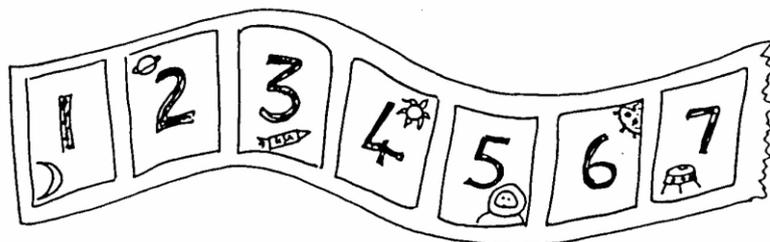
- Take turns.
- Choose a number between 1 and 10 and write it down.
- Throw the dice and say the dice number.
- Work out the difference between the chosen number and the dice number, e.g. if you wrote down a 2 and the dice shows 5, the difference is 3.

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



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.

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!
- Sort contents of cupboard according to 3D shapes names e.g. cube, cuboid, sphere, cone, cylinder, pyramids.

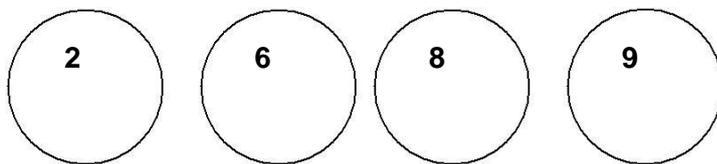
Shopping Game

Use items from cupboard to price. E.g. up to 10p/20p. Use real coins (e.g. 1p, 2p, 5p, 10p) to buy the items.

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?

Car Spotting

How many red, blue, green cars can you spot?

Read the number plates on cars.

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.
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.
- ◆ You can only take your pieces of pasta if you are right.
- ◆ The first person to collect 20 beans wins!

