



# Year 2

Supporting your child at  
home with maths



## Mathematics in Year 2

During Key Stage 1, there is a big focus on developing basic number skills. That means securing a good understanding of place value, and recognising number bonds to 20. Practising these skills frequently will help children's mathematical thinking throughout school.

Number bonds are essential to the understanding of maths. Children in Year 2 learn their number bonds to 20, that is being able to quickly recall the total of any two numbers up to 20, e.g.  $5 + 9 = 14$ , rather than having to count on to find the answer.

At the end of Year 2, all children will sit the National Curriculum Tests for Key Stage 1. This will include a short arithmetic test of 15 questions, and a second paper of broader mathematics which will last around 35 minutes.

### Number and Place Value

- Recognise place value in two-digit numbers, e.g. knowing that the 1 in 17 represents 10
- Read and write numbers up to 100 as words
- Count in 2s, 3s and 5s
- Compare and order numbers up to 100
- Use the  $<$  and  $>$  symbols to represent the relative size of numbers

### Calculations

- Recall number bonds up to 20 fluently
- Add and subtract numbers mentally and using objects, including two-digit numbers
- Show that adding two numbers can be done in any order, but subtracting cannot
- Recognise that addition and subtraction are inverse operations
- Learn the multiplication and division facts for the 2x, 5x and 10x tables
- Show that multiplying two numbers can be done in any order, but dividing cannot
- Solve problems using the  $\times$  and  $\div$  symbols

### Fractions

- Find  $\frac{1}{2}$ ,  $\frac{2}{2}$  and  $\frac{3}{2}$  of an object or set of objects
- Find the answer to simple fraction problems, such as finding  $\frac{1}{2}$  of 6

### Measurements

- Use standard units to measure length (centimetres and metres), mass (grams and kilograms), temperature (degrees Celsius) and capacity (millilitres and litres)
- Use the £ and p symbols for money amounts
- Combine numbers of coins to make a given value, for example to make 62 pence
- Tell the time to the nearest five minutes on an analogue clock
- Know the number of minutes in an hour and hours in a day

## About the statements

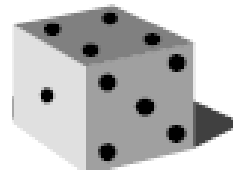
These targets show some of the things your child should be able to do by the end of Year 2.

Some statements are harder than they seem, e.g. children who can count up to 100 may still have trouble saying which number comes after 47 or which number comes before 50.

## Fun activities to do at home

### Pasta subtraction

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

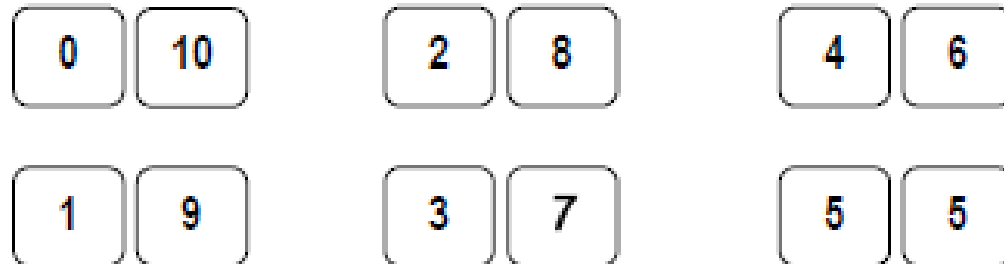


- ◆ Start with a pile of pasta in the middle. Count them.
- ◆ Throw a dice. Say how many pieces of pasta will be left if you subtract that number.
- ◆ Then take the pieces of pasta away and check if you were right!
- ◆ Keep playing.
- ◆ The person to take the last piece wins !

## 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.

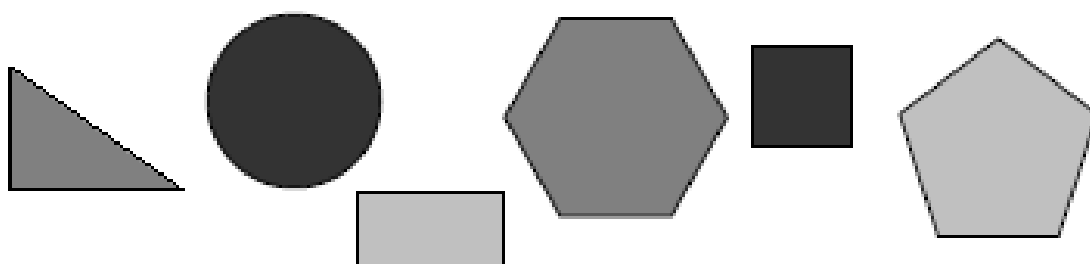
- ◆ Shuffle the cards and give them to your child.
- ◆ Time how long it takes to find all the pairs to 10.



Repeat later in the week. See if your child can beat his / her time.

## Guess my shape

- ◆ Think of a 2-D shape (triangle, circle, rectangle, square, pentagon or hexagon). Ask your child to ask questions to try and guess what it is.
- ◆ You can only answer *Yes* or *No*. For example, your child could ask: *Does it have 3 sides?* or: *Are its sides straight?*
- ◆ See if he can guess your shape using fewer than five questions.
- ◆ Now ask them to choose a shape so you can ask questions.



## 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.

91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

- ◆ Roll a dice twice. Add the two numbers.
- ◆ Move along that number of spaces. Before you move, you must work out what number you will land on.
- ◆ If you are wrong, you don't move!
- ◆ The first to the end of the board wins.

For a change, you could roll the dice and move backwards. Or you could roll the dice once, then move the number that goes with your dice number to make 10, e.g. throw a 3, move 7.

## Straight lines

Choose 4 toys and lay them on the table in order of length. Use a ruler to measure each toy to the nearest cm.

## Counting

Practise counting. Start at 5, and count on from there to 11.

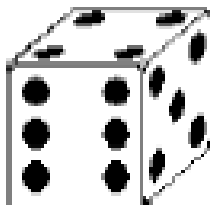
Start at 9, count back from there to zero.

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 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.

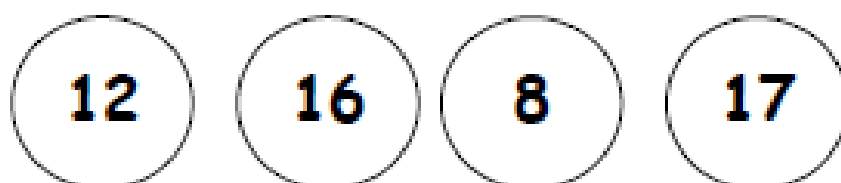
## Shopping maths

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

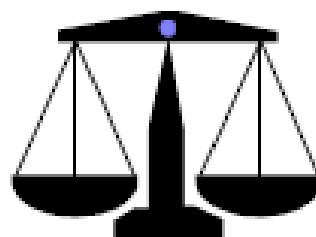
Draw four circles each on your piece of paper. Write four numbers between 3 and 18, one in each circle.



- ◆ 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.

## 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.

## Out and about

- ◆ 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?

31 39 36 35 33

- ◆ Next week, look for 'fifties' numbers, or 'sixties'...

## How much?

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





