

Year 2

By the end of Year 2, most children should be able to...

- Count to up to 100 objects, grouping them and counting in 10s, 5s and 2s.
- Read and write 2-digit and 3-digit numbers, recognise odd and even and describe and continue patterns.
- Put 2-digit numbers in order and put them on a number line; use greater than (>), smaller than (<) and =.
- Explain what each digit in a number represents (e.g. 142 – 1=100, 4=40, 2=2)
- Add and subtract numbers under 20 in their heads; know all pairs of multiples of 10 that make 100 (e.g. 40+60, 70+30 etc).
- Know by heart the 2 and 10 times tables, and know related division facts.
- Double and halve all numbers to 20.
- Find $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$ of shapes and sets of objects.
- Use lists, tables, and diagrams; represent data as block graphs or pictograms to show results.
- Measure or weigh using metres, centimetres, kilograms or litres.
- Use a ruler to draw and measure lines to the nearest centimetre.
- Use symbols +, -, x, ÷ and =, to record work with number sentences.
- Tell the time to the half and quarter hour; know seconds, minutes, hours and days and how they relate to one another
- Name 2-D and 3-D shapes and describe their features; sort and describe shapes referring to their properties.
- Solve number problems (including pounds, pence, measures etc), and explain how to work them out.



End of Year Expectations for Year 2

Help your child with mathematics

This booklet aims to provide Parents/Carers with information about the end of year expectations for Year 2 children in our school. The National Curriculum outlines these expectations as being the minimum requirements your child should meet. If you have any further questions regarding these expectations, please come and talk to us.

About the targets

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

A target may be harder than it seems, e.g. a child 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

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.



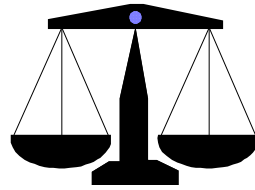
and **6**

- ◆ 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.

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?

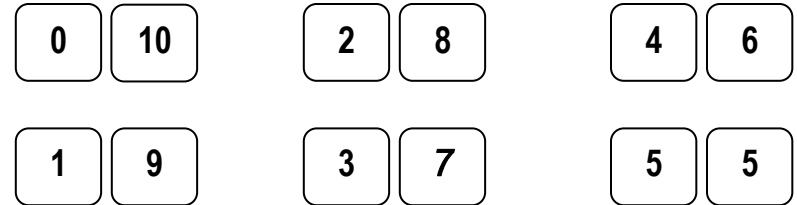
- ◆ Once a week, tip out the small change from a purse. Count it up with your child.



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.

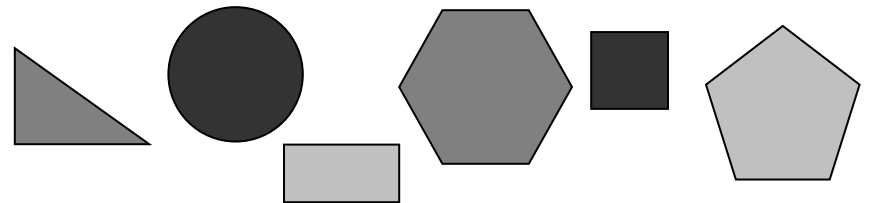
- ◆ Shuffle the cards and give them to your child.
- ◆ Time how long it takes to find all the pairs to 10.



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.

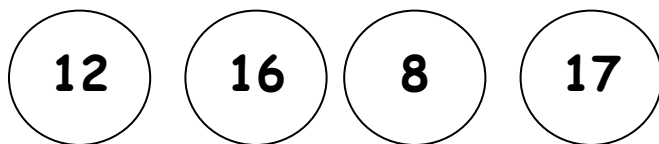
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

- ◆ 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.

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.

Car numbers

- ◆ Each person chooses a target number, e.g. 15.
- ◆ How many car numbers can you spot with 3 digits adding up to your target number, e.g. K456 XWL.
- ◆ So $4 + 5 + 6 = 15$, bingo!



Bean subtraction

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

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



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.

Straight lines

Choose 4 different lengths between 5 and 20 centimetres. Use a ruler marked in centimetres. Draw lines of each length.