Supporting your child at home

Evenlode Primary School
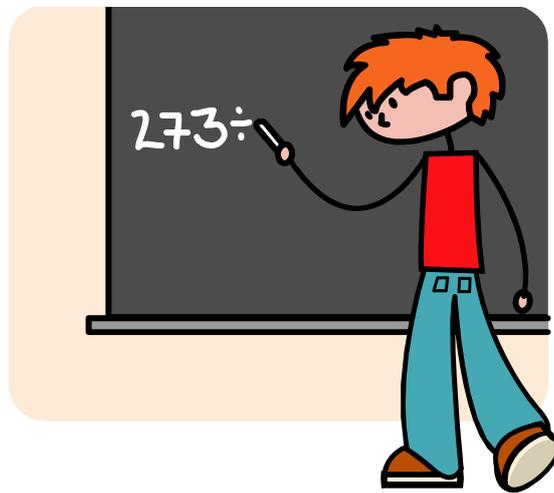
Year 5

Mathematics

A booklet for parents

About the statements

These statements show some of the things most children should be able to do by the end of Year 5.

A statement might be harder than it seems, e.g. a child may subtract 3994 from 9007 by using a formal written method, without realising it is quicker to count on from 3994 up to 9007 in his / her head.

(See Calculation Methodology Guidelines)

By the end of year 5, most children should be able to...

- Explain what each digit represents in whole numbers and decimals up to two places, and partition, round and order these numbers

- Be able to calculate fractions of numbers; recognise equivalent, improper and mixed number fractions; understand the link between fractions, decimals and percentages (5/10 = 0.5 = 50%)

- Use knowledge of place value, addition and subtraction of two digit numbers to derive sums and differences, doubles and halves of decimals (e.g. 6.5 + 2.7, 6.5 - 2.7, half of 5.6, double 0.34)

- Use efficient written methods to add and subtract whole numbers and decimals with up to two places

- Use a range of strategies to multiply and divide numbers, knowing how the inverse helps to check calculations

- Read and plot coordinates in the first quadrant; recognise parallel and perpendicular lines in grids and shapes; use a ruler to draw shapes with perpendicular and parallel sides; correctly measure and name angles to within 5° using a protractor

- Draw and measure lines to the nearest millimetre; measure and calculate the perimeter of regular and irregular polygons; use the formula for the area of a rectangle to calculate the rectangle's area

➢ Construct frequency tables, pictograms, bar and line graphs to represent the frequencies of events and changes over time; understand the mode and range of data

Alongside all of these statements children need to be continuously learning and applying their skills in solving problems and become confident when faced with challenges.

Fun activities to do at home

Line it up

You need a ruler marked in centimetres and millimetres.

♦ Use the ruler to draw 10 different straight lines on a piece of paper.
♦ Ask your child to estimate the length of each line and write the estimate on the line.
♦ Now give them the ruler and ask them to measure each line to the nearest millimetre.
♦ Ask them to write the measurement next to the estimate, and work out the difference.
♦ A difference of 5 millimetres or less scores 10 points. A difference of 1 centimetre or less scores 5 points.
♦ How close to 100 points can they get?

My estimate is 8.5 cm

Battleships

♦ Draw two grids like this

	A	B	C	D	E	F	G	H	I	J
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
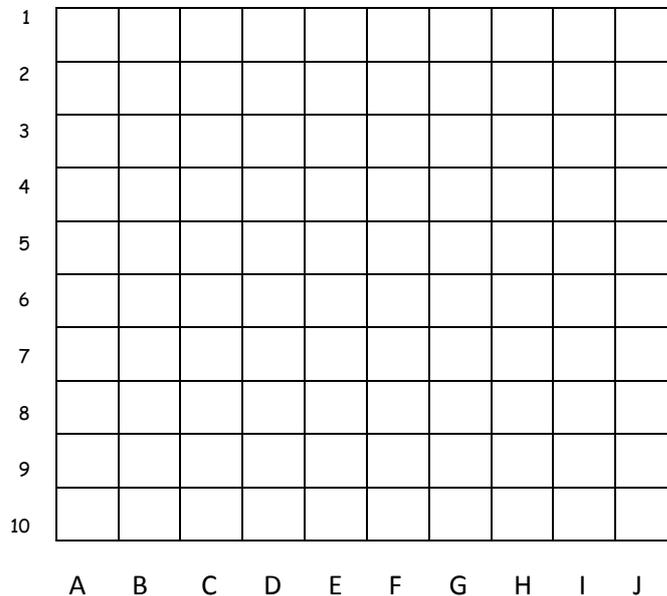
➢ Choose ships of various lengths (use between 2 and 4 squares)
➢ Hide your grid from your partner
➢ Take it in turns to guess the co-ordinates of your opponent's ships.
➢ Respond with "hit" or "miss"
➢ Try to get as close as possible to 555
➢ The winner is the person to sink all their opponent's ships

How much?

While shopping, point out an item costing less than £1.
Ask your child to work out in their head the cost of 3 items.
Ask them to guess first. See how close they come.
If you see any items labelled, for example, '2 for £3.50', ask them to work out the cost of 1 item for you, and to explain how they got the answer.

Times tables

Say together the six times table forwards, then backwards. Ask your child questions, such as:
Nine sixes? How many sixes in 42?
Six times four? Forty-eight divided by six?
Three multiplied by six? Six times what equals sixty?
Repeat with the seven, eight and nine times tables.

Make a grid like this one

x	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	8	10	12	14	16	18	20
3	0	3	6	9	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40
5	0	5	10	15	20	25	30	35	40	45	50
6	0	6	12	18	24	30	36	42	48	54	60
7	0	7	14	21	28	35	42	49	56	63	70
8	0	8	16	24	32	40	48	56	64	72	80
9	0	9	18	27	36	45	54	63	72	81	90
10	0	10	20	30	40	50	60	70	80	90	100

o Shade in all the tables facts that your child knows, probably the 1s, 2s, 3s, 4s, 5s and 10s.
o Some facts appear twice, e.g. 7 x 3 and 3 x 7, so cross out one of each.
o Are you surprised how few facts are left?
o There might only be 10 facts to learn. So take one fact a day and make up a silly rhyme together to help your child to learn it, e.g. *nine sevens are sixty-three, let's have lots of chips for tea!*

Target 1000

♦ Roll a dice 6 times.
♦ Use the six digits to make two three-digit numbers.
♦ Add the two numbers together.
♦ How close to 1000 can you get?

Finding areas and perimeters

Perimeter = distance around the edge of a shape
Area of a rectangle = length x breadth (width)

♦ Collect 5 or 6 used envelopes of different sizes.
♦ Ask your child to estimate the perimeter of each one to the
nearest centimetre. Write the estimate on the back.
♦ Now measure. Write the estimate next to the measurement.
♦ How close did your child get?
♦ Now choose 5 or 6 adverts from newspapers or magazines.

You could do something similar using an old newspaper, e.g.
♦ Ask your child to estimate the area of each advert to the nearest
centimetre squared (cm²)– write these down.
♦ Now measure and calculate
♦ How close did your child get?

Telephone challenges

♦ Challenge your child to find numbers in the telephone directory where the digits add up to 42.
♦ Find as many as possible in 10 minutes.
On another day, see if they can beat their previous total

Telephone: 01264 738 281

Dicey Subtractions

♦ Take turns to roll 2 dice.
♦ Fill in the missing boxes.

400☐ - 399☐   e.g. 4002 - 3994

♦ Count on from the smaller to the larger number, e.g. *3995, 3996, 3997, 3998, 3999, 4000, 4001, 4002.*
♦ You counted on 8, so you score 8 points.
♦ Keep a running total of your score .
♦ The first to get 50 or more points wins.

Dicey Division

For this game you need a 1–100 board (a snakes and ladders board will do), a dice and 20 coins or counters.

♦ Take turns.
♦ Choose a two-digit number. Roll a dice. If you roll 1, roll again.
♦ If your two-digit number divides exactly by the dice number, put a coin on your chosen two-digit number. Otherwise, miss that turn.
♦ The first to get 10 counters on the board wins.

Decimal Number Plates

♦ Choose 2 digits from a car registration plate.

FD56 UPN

♦ Make the smallest and largest numbers you can, each with 1 decimal place, e.g. 5.6 and 6.5.
♦ Now find the difference between the two decimal numbers, e.g. 6.5 – 5.6 = 0.9.
♦ Whoever makes the biggest difference scores 10 points.
♦ The person with the most points wins.
Play the game again, but this time score 10 points for the smallest difference, or 10 points for the biggest total. (If you add the numbers)

Guess my number

♦ Choose a number between 0 and 1 with one decimal place, e.g. 0.6.
♦ Challenge your child to ask you questions to guess your number. You may only answer 'Yes' or 'No'. For example, he could ask questions like 'Is it less than a half?'
♦ See if he can guess your number in fewer than 5 questions.
♦ Now let your child choose a mystery number for you to guess.
Extend the game by choosing a number with one decimal place between 1 and 10, e.g. 3.6. You may need more questions