



Year 5: Autumn term 1

Topics studied this half term:

- Number and place value
- Addition and subtraction
- Multiplication and division

Within number and place value, your children will be learning to:

- Read and write roman numerals to 1000
- Read, write, order and compare numbers to one million
- Round numbers up to one million
- Count in 10s, 100s, 1000s, 10,000s, and 100,000s
- Solve problems involving negative numbers

Within addition & subtraction, your children will be learning to:

- Add and subtract whole numbers with more than 4-digits using the column method
- Round numbers in order to estimate and approximate
- Use inverse operations for addition and subtraction
- Multi-step addition and subtraction problems

Within multiplication & division, your children will be learning to:

- Multiply 4-digits by 1-digit
- Multiply 2-digits using the area model
- Multiply 2-digits by 2-digits
- Multiply 3-digits by 2-digits
- Multiply 4-digits by 2-digits
- Divide 4-digits by 1-digit
- Divide with remainders

Tips for good homework habits:

Plan a homework timetable and agree a time when your child will do their homework.

Number and place value

HERE'S THE MATHS

Your child is learning to read, write, order and compare numbers to 100 000, focusing on the place value of each digit. They round 5-digit numbers to the nearest 10 (100, 1000), focusing on the ones (tens, hundreds) digit when deciding whether to round up or down. To round to the nearest 10 (100, 1000), 5 (50, 500) or greater is rounded up; 4 or fewer (49 499) is rounded down.

ACTIVITY

1	23,476	73,821	53,932	83,147	33,815	63,743	123456
2	70,654	23,412	98,526	54,720	88,888	56,904	123456
3	34,761	21,353	65,217	43,905	74,279	51,673	123456
4	42,125	78,545	64,150	95,435	10,785	100,000	123456
5	19,650	67,204	80,007	54,098	78,001	40,057	123456
6	37,412	35,908	32,249	30,865	34,534	39,382	123456

What to do

- Take turns. Roll a dice to decide a row. Roll the dice a second time to decide on the operation.
- Cross out that number in the final column in your colour once it has been answered.
- A number can only be used once. If you roll dice that have been used, miss a go.
- The winner has the most numbers crossed out when you stop playing.

You will need:

- 1–6 dice
- 2 pencils in different colours

Roll a 1 – Read the numbers in the row

Roll a 2 – Round the row to the nearest 10

Roll a 3 – Order the row from smallest to largest

Roll a 4 – Round the row to the nearest 100

Roll a 5 – Find a common property in the row of figures

Roll a 6 – Round the row to the nearest 1000

QUESTIONS TO ASK

What is the 4 worth in 24 567?

Explain the function of the zero in 40 321.

What is 6543×10 ?

Addition and subtraction

HERE'S THE MATHS

Your child is practising addition of large numbers with more than four digits, using both mental methods, number lines, jottings and the use of the formal written method of columnar addition. They will be encouraged to look for mental methods, supported by jottings, and to use rounding to check answers to calculations.

ACTIVITY

Number to add is _____				
21 976	32 953	19 978	28 053	17 632
Number to add is _____				
30 965	15 709	16 078	23 455	25 716

What to do

- Roll the dice five times to give a 5-digit number.
- One person adds this number to each of the five numbers in the row, using the most appropriate method.
- The other person roughly checks the answers by rounding and adding mentally and then uses the calculator to find the exact answer.
- Roll the dice five more times to give a new number.
- Change roles.
- Discuss which role you preferred.

You will need:

- pencil and paper
- calculator
- 1–6 dice

Variation

- Roll the dice four times to give a 4-digit number. One person subtracts this from each of the numbers in turn. Continue as before.

QUESTIONS TO ASK

What is the 7 worth in 75 621?

Suggest two numbers with no zero place markers that have a total of 50 000.

Partition 34 187.

What is the 7 worth in 27 106?

Which digits stay the same when you add 400 to 24 867?

Multiplication and division

HERE'S THE MATHS

Your child is developing methods to calculate $TO \times TO$, using an appropriate method, including the formal written method. Your child should develop the habit of estimating the answer before beginning the calculation to make sure that their answer is sensible. They should always look to see if a mental method is possible. For example, to calculate 67×34 , first round to 70×30 to give an estimated answer of 2100. Then set out the calculation as shown.

$$\begin{array}{r}
 67 \\
 \times 34 \\
 \hline
 2628 \quad (67 \times 4) \\
 20210 \quad (67 \times 30) \\
 \hline
 2278
 \end{array}$$

ACTIVITY

What to do

- Open each book to give four 2-digit page numbers, e.g. 20 and 21, and 32 and 33.
- Both calculate the possible $TO \times TO$ combinations using one page from each book, i.e. 20×32 , 20×33 and 21×32 , 21×33 .
- Do this as efficiently as possible, looking for mental methods and using the result of one calculation to work out another.
- Compare and discuss your strategies and answers.
- Repeat with new page selections.
- Continue for 10 minutes.

Variation

- To make it easier, open one book and multiply the two consecutive page numbers.

You will need:

- 2 books with about 100 pages
- pencil and paper

QUESTIONS TO ASK

What is 80×40 ?

What is $£70 \times 60$?

Can you estimate the answer to 58×42 ?

What method would you use to multiply 49×19 ?

How many pairs of numbers can you suggest that, when multiplied, give an answer of 400?