



Year 4: 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:

- Recognise and write roman numerals to 100
- Round to the nearest 10, 100 and 1000
- Count in 1000s
- Partition numbers into 1000s, 100s, 10s and 1s
- Use a number line to 10,000
- Find 1000 more or less
- Compare and order numbers
- Count in 25s
- Use negative numbers

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

- Add and subtract 1s, 10s, 100s and 1000s
- Add two 4-digit numbers with more than one exchange
- Subtract two 4-digit numbers with more than one exchange
- Develop efficient subtraction strategies
- Estimate answers
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Within multiplication & division, your children will be learning to:

- Multiply using written methods
- Multiply 2-digits by 1-digit
- Multiply 3-digits by 1-digit
- Divide 2-digits by 1-digit
- Divide 3-digits by 1-digit

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 handle numbers with four digits (thousands) and needs to understand that the position of each number indicates its value. To order 4-digit numbers, they need to look firstly at the number of thousands, then the number of hundreds, then the tens and finally the ones. They also work out thousands more or less than any 4-digit number, focusing on which digit changes and which digits stay the same.

ACTIVITY

What to do

- Find the date on the coins and put them in date order.
- Practise reading the date as a number, e.g. for 1985, read one thousand nine hundred and eighty-five, not nineteen eighty-five.
- Throw the dice and add that number of thousands to give a new number.
- If you get the answer correct, you win the coin.
- The winner is the one with the most coins.

You will need:

- 10 copper coins
- 1–6 dice

Variation

- Write 4-digit numbers on paper to give a bigger range of numbers.

QUESTIONS TO ASK

What is the value of the 4 in 4072?

Point to a digit and ask what it stands for.

What is the largest number? How do you know?

Why is 4001 bigger than 3999?

- Ask more questions liked these and ask your child to make up questions to ask you.

Addition and subtraction

HERE'S THE MATHS

Your child is learning to practise mental addition and subtraction methods with increasingly large numbers. Remember, it is not always necessary to use a formal written addition method. Once children have been taught formal methods, they often have a tendency to launch straight into a written calculation. Encourage your child to look at the calculation first to see if it can be done mentally and always to estimate the answer before working it out.

ACTIVITY

400	99	203	150
102	650	121	142
258	533	250	519
181	270	397	267

You will need:

- 4 pieces of paper with the words 'tickets', 'hats', 'bicycles' and 'apples' written on them

What to do

- Choose one paper and three numbers from the grid and write a word problem involving addition and subtraction, using the numbers and subject chosen, e.g. a bike-hire shop has 400 bikes. 99 are borrowed for the day in the morning and another 131 in the afternoon. How many bikes are left in the shop?
- The answer number does not need to be in the table.
- Try each other's problem.
- Continue for 10 minutes.

Variation

- Vary the numbers and the subjects.

QUESTIONS TO ASK

What is the sum of these two numbers?

Which pair of numbers has the largest/smallest total?

Which pair of numbers has the largest/smallest difference?

Which two numbers add up to another number in the grid?

Which pairs of numbers add up to multiples of 100?

Addition and subtraction

HERE'S THE MATHS

Your child is revising subtraction methods and strategies. Some calculations can be done mentally, sometimes jottings are sufficient and sometimes the formal written method is appropriate. Encourage your child to estimate and check answers to calculations.

ACTIVITY

What to do

- Turn over four cards to make a 4-digit number, e.g. 5, Ace, 9, Jack gives the number 5190.
- Turn over two cards to make a 2-digit number.
- Subtract this number from the 4-digit number using a number line to make jottings.
- Check with a calculator.
- Change roles.

You will need:

- pencil and paper
- pack of playing cards with the 10s removed (picture cards represent zero)

Variation

- Use one card to subtract a 1-digit number or three cards to subtract a 3-digit number.

QUESTIONS TO ASK

Estimate the answer to $3245 - 1356$.

Count back in hundreds from 2345 to 1545.

Take 9 from 1234.

In word problems, which words usually mean that the operation will be subtraction?

Multiplication and division

HERE'S THE MATHS

This week your child is practising the formal written method of multiplication for $\text{HTO} \times \text{O}$ calculations, including estimating and checking the answers to calculations. They continue to look carefully at each calculation to determine the most efficient method to use.

ACTIVITY

What to do

- One person chooses 3 red cards and makes the largest possible HTO number.
- Choose a black card to multiply the HTO number by, using a method of choice.
- The other person has a turn.
- The person with the higher answer scores a point.
- Play for 10 minutes.
- The highest score wins.

You will need:

- set of 0–9 cards (use playing cards of a red suit; use the Joker to represent zero)
- set of 2–9 cards (use playing cards of a black suit)

QUESTIONS TO ASK

Tell me a calculation with two 4-digit numbers that you can do mentally.

Estimate the answer to 189×8 .

Partition 743 into hundreds, tens and units.

Add 2000 to 4765.

Add 46 to 390.