EYFS | What your child should know

Learning about numbers through play

What your child will be learning

- Count objects accurately using one number word for each object; know the final count gives the total.
- Spot how many objects there are in a small group without counting each one (for example, the dots on a dice).
- Explore numbers up to 10 and different ways to make 5 or 10 (for example, 3 + 2 = 5).
- Compare quantities using more, fewer, same and equal; find one more and one less.
- Explore repeating patterns, shapes, positions, length, mass, capacity and daily routines.
- Use stories, toys, fingers and simple number grids to work things out, rather than written sums.

Easy ways to help at home

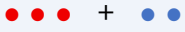
Count toys while tidying, share out fruit or snacks, spot dice patterns and talk about shapes you see around you.

EYFS | Maths examples explained step by step

You do not need to be a maths expert to help! These examples show how your child may work things out in school. Ask them to explain their thinking, and try using everyday objects or drawings together.

Making five

There are 3 red toy cars and 2 blue toy cars. How many cars altogether?



3 + 2 = 5

Try this together: Let your child move five toys into two groups. Ask: Can you make five another way?

Number bonds to ten

You have 6 grapes. How many more do you need to make 10?

6 + □ = 10

6 + 4 = 10

Try this together: Place six counters in a ten-frame and count the four empty spaces.

One more and one less

There are 7 ducks on the pond. One more arrives. Then imagine one flies away.

7 + 1 = 8

7 − 1 = 6

Try this together: Use seven small objects and physically add or take away one.

Repeating patterns

Make a necklace with alternating red and blue beads. What colour comes next?

RED BLUE RED BLUE?

Next: RED

Try this together: Ask your child to say the repeating part aloud: red, blue.

Year 1 | What your child should know

Getting confident with numbers and simple calculations

What your child will be learning

- Count, read and write numbers to 100; understand tens and ones and compare numbers.
- Learn pairs of numbers that make 10 and 20, and use them to help with subtraction.
- Add and take away numbers up to 20 using objects, pictures and number lines.
- Recognise +, − and = and solve missing-number problems.
- Count in 2s, 5s and 10s; explore equal groups and sharing.
- Recognise halves and quarters; identify common shapes, coins and time to the hour/half-hour.

Easy ways to help at home

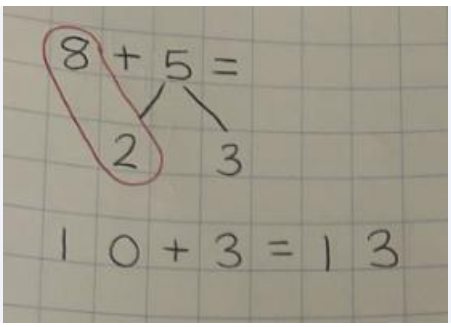
Play dice or domino games, set up a pretend shop and ask questions such as "What goes with 6 to make 10?"

Year 1 | Maths examples explained step by step

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Addition by making ten

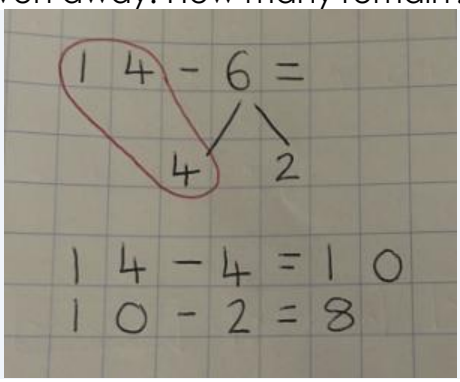
There are 8 apples in a bowl and 5 more on the table. How many apples?



Try this together: Break 5 into 2 and 3. First fill the ten-frame, then add the remaining 3.

Subtraction across ten

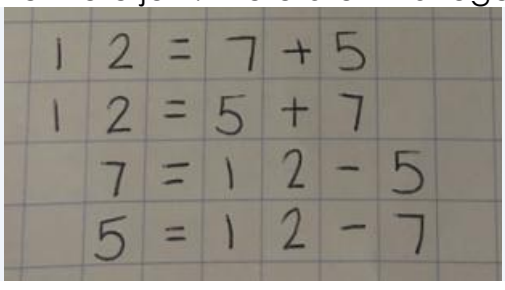
There are 14 stickers. Six are given away. How many remain?



Try this together: Split 6 into 4 and 2. Jump back to 10 first on a number line.

Fact family

Seven children are playing; five more join. There are 12 altogether.



Try this together: Use the same three numbers to make different additions and two subtractions.

Equal groups

Three plates each have 2 biscuits. How many biscuits are there?

Year 2 | What your child should know

Building confidence with tens, ones and number facts

What your child will be learning

- Read, write and put numbers to 100 in order, and split them into tens and ones (for example, 47 = 40 + 7).
- Remember simple addition and subtraction facts up to 20 and use them with bigger numbers.
- Add and subtract two-digit numbers in their heads, with pictures and by beginning to write calculations in columns.
- Learn the 2, 5 and 10 times tables and related division facts, using rows and equal groups to help.
- Recognise thirds, halves, quarters, two-thirds and three-quarters.
- Tell time to five minutes; solve money problems and measure length, mass and capacity.

Easy ways to help at home

Count in 2s, 5s and 10s while walking or sorting objects. Try questions such as "If 5 × 2 = 10, what is 10 ÷ 2?"

Year 2 | Maths examples explained step by step

You do not need to be a maths expert to help! These examples show how your child may work things out in school. Ask them to explain their thinking and try using everyday objects or drawings together.

Adding by partitioning

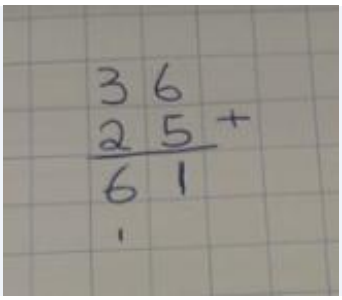
A class has 36 pencils and receives 25 more. How many pencils now?

30 + 20 = 50
6 + 5 = 11
50 + 11 = 61

Try this together: Combine tens and ones separately. Exchange ten ones for one ten.

Column addition with an exchange

The library has 36 books on one shelf and 25 on another.



Subtraction in steps

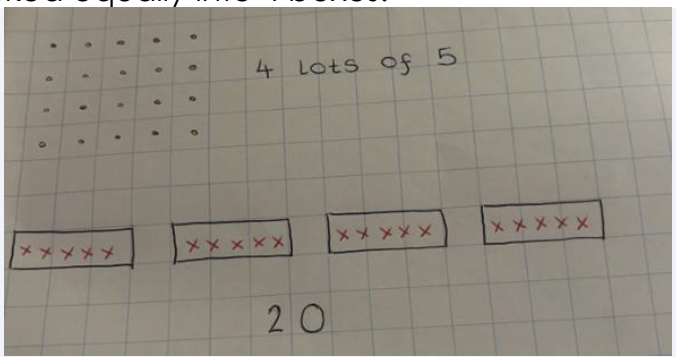
There are 52 tickets and 27 are sold. How many are left?

52 − 20 = 32
32 − 7 = 25

Try this together: Subtract two tens, then seven ones. Use a number line if useful.

Arrays and division

There are 20 cakes packed equally into 4 boxes.



Try this together: Draw four rows of five dots. Count the rows and columns.

Year 3 | What your child should know

Working with hundreds and learning written calculations

What your child will be learning

- Understand numbers to 1,000 and place value of hundreds, tens and ones.
- Add and subtract up to three-digit numbers using formal column methods.
- Make a sensible guess before calculating, then check answers using the opposite operation (such as subtraction to check addition).
- Recall 3, 4 and 8 multiplication/division facts.
- Multiply a two-digit number by a one-digit number, sometimes by splitting it into tens and ones.
- Understand tenths, fractions of quantities and fractions with the same denominator.
- Calculate perimeter; read time to a minute; recognise angles and turns.

Easy ways to help at home

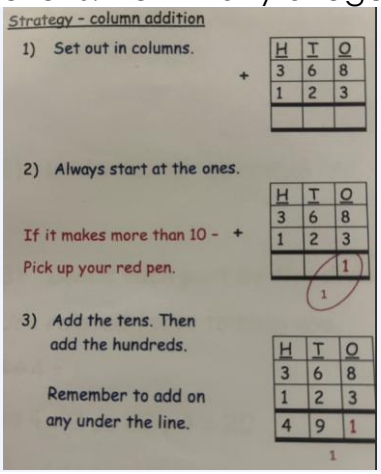
Practise the 3, 4 and 8 times tables in short bursts. Before working out a sum, ask "Roughly what do you think the answer will be?"

Year 3 | Maths examples explained step by step

You do not need to be a maths expert to help! These examples show how your child may work things out in school. Ask them to explain their thinking and try using everyday objects or drawings together.

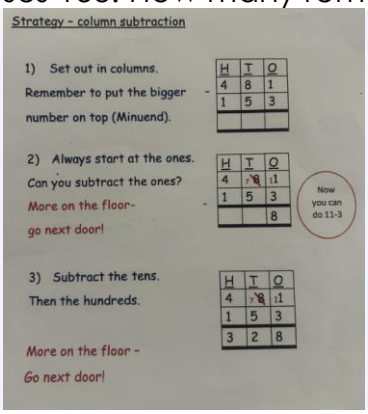
Column addition

Two classes collect 368 and 123 tokens. How many altogether?



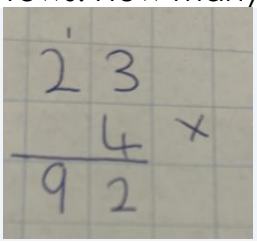
Column subtraction

A school orders 481 pencils and uses 153. How many remain?



Short multiplication

There are 23 seats in each row and 4 rows. How many seats?



Fractions of an amount

A bag has 24 marbles. One third are blue. How many are blue?

⅓ of 24 = 24 ÷ 3 = 8

⅔ of 24 = 8 × 2 = 16

Year 4 | What your child should know

Bigger numbers and times tables up to 12 × 12

What your child will be learning

- Read and compare numbers beyond 1,000; round to nearest 10, 100 and 1,000.
- Use column addition and subtraction with up to four-digit numbers.
- Know times tables up to 12 × 12 and related division facts, and find pairs of numbers that multiply to make another number.
- Multiply and divide two- and three-digit numbers by one digit using formal written methods.
- Recognise fractions that have the same value (such as 1/2 and 2/4), and add or subtract fractions with the same bottom number.
- Understand tenths and hundredths in decimal numbers, and how numbers change when divided by 10 or 100.
- Calculate rectangle area and perimeter; use coordinates, angles and symmetry.

Easy ways to help at home

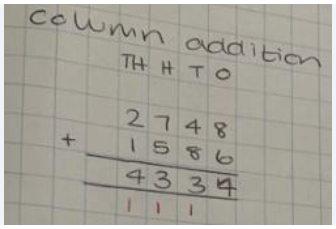
A few minutes of times-table practice regularly can make a big difference. Mix multiplication questions with matching division questions.

Year 4 | Maths examples explained step by step

You do not need to be a maths expert to help! These examples show how your child may work things out in school. Ask them to explain their thinking and try using everyday objects or drawings together.

Four-digit column addition

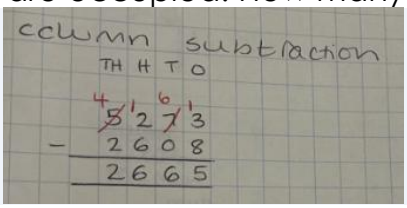
The school raises £2,748 at one event and £1,586 at another. How much is raised in total?



Try this together: Add from the ones column. Exchange when a column totals 10 or more.

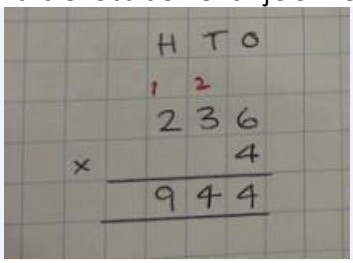
Four-digit subtraction

A stadium has 5,273 seats; 2,608 are occupied. How many are empty?



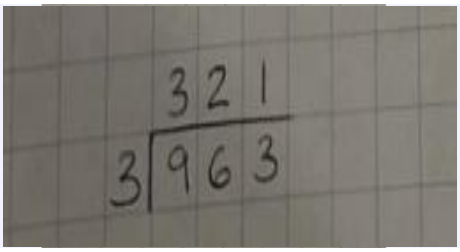
Short multiplication

Four coaches each carry 236 pupils across several journeys. How many pupils altogether?



Short division

£963 needs to be shared between 3 people. How much will they get each? £321



Year 5 | What your child should know

Working with larger numbers, multiplication and division

What your child will be learning

- Read and compare numbers to at least 1,000,000; round and use negative numbers.
- Add and subtract large whole numbers using column methods.
- Multiply up to four digits by one or two digits using formal written methods.
- Divide up to four digits by one digit using short division; interpret remainders.
- Explore number patterns, including factors, multiples, prime numbers, square numbers and cube numbers.
- Add and subtract fractions, and change between mixed numbers (1 1/2) and fractions such as 3/2.
- Use decimals to three places, percentages, measures, area and perimeter.

Easy ways to help at home

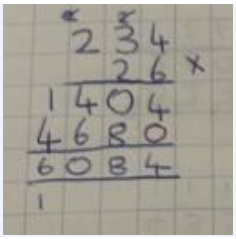
Ask your child to explain each line of a long multiplication. For example, multiplying by 20 is different from multiplying by 2, so the second line starts in the tens column.

Year 5 | Maths examples explained step by step

You do not need to be a maths expert to help! These examples show how your child may work things out in school. Ask them to explain their thinking and try using everyday objects or drawings together.

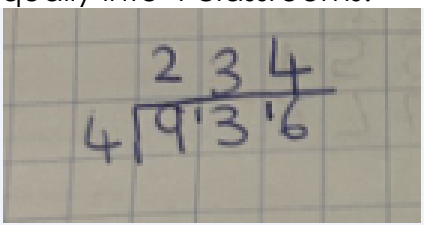
Long multiplication

A theatre sells 234 tickets for 26 performances. How many tickets were sold?



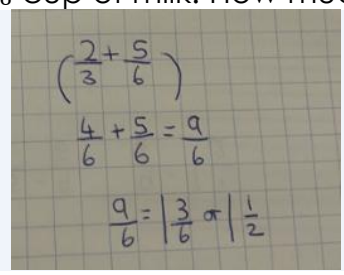
Short division

There are 936 pencils packed equally into 4 classrooms.



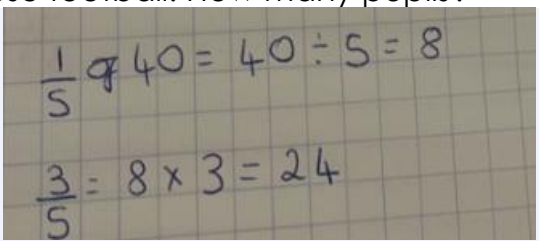
Adding unlike fractions

A recipe uses ⅔ cup of milk and ⅚ cup of milk. How much milk altogether?



Finding a fraction of a quantity

Three fifths of 40 pupils choose football. How many pupils?



Year 6 | What your child should know

Using maths confidently to solve different problems

What your child will be learning

- Read and round numbers up to 10,000,000; use negative numbers.
- Use efficient written and mental methods for all four operations.
- Multiply up to four digits by two digits; divide up to four digits by two digits.
- Decide what a leftover amount (remainder) means in a problem, and check answers using the opposite operation.
- Use common factors/multiples, order of operations and fraction calculations.
- Understand how fractions, decimals and percentages link together, and solve problems about comparing amounts.
- Find missing numbers, work out area and volume, read charts and solve problems involving angles.

Easy ways to help at home

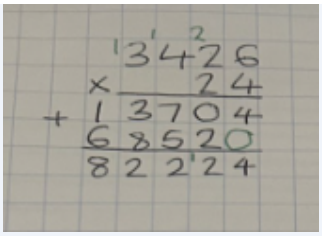
Ask "Does that answer seem sensible?", "How could you check it?" and "Can you show me another way?"

Year 6 | Maths examples explained step by step

You do not need to be a maths expert to help! These examples show how your child may work things out in school. Ask them to explain their thinking and try using everyday objects or drawings together. We have full arithmetic guides if you would like them.

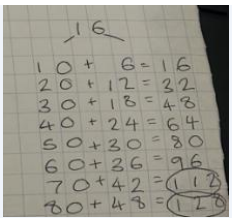
Long multiplication

A concert venue sells 3,426 tickets on 24 dates. How many were solved altogether?



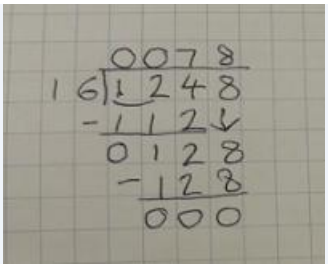
Multiples help with division

A school packs 1,248 exercise books into boxes of 16. How many boxes are needed? Find multiples first:



Long division

How many boxes of 16 are needed for 1,248 books?



Fractions and percentages

A coat costs £240 and is reduced by 35%. What is the discount?

