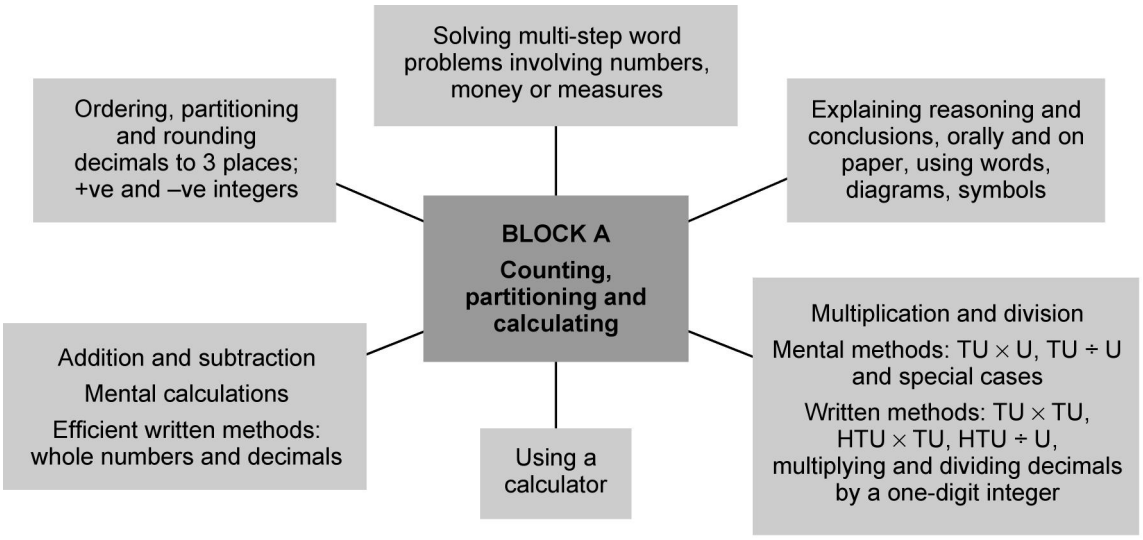
# Year 6: Block A — Three 2-week units

## Counting, partitioning and calculating




| Objectives<br>End-of-year expectations (key objectives) are highlighted | Units<br>1 | 2 | 3 |
|---|---|---|---|
| • Explain reasoning and conclusions, using words, symbols or diagrams as appropriate | ✓ | ✓ | ✓ |
| • Solve multi-step problems, and problems involving fractions, decimals and percentages; choose and use appropriate calculation strategies at each stage, including calculator use | | ✓ | ✓ |
| • Find the difference between a positive and a negative integer, or two negative integers, in context | ✓ | | |
| • Use decimal notation for tenths, hundredths and thousandths; partition, round and order decimals with up to three places, and position them on the number line | ✓ | ✓ | ✓ |
| • Use knowledge of place value and multiplication facts to 10 × 10 to derive related multiplication and division facts involving decimals (e.g. 0.8 × 7, 4.8 ÷ 6) | ✓ | ✓ | |
| • Calculate mentally with integers and decimals: U.t ± U.t, TU × U, TU ÷ U, U.t × U, U.t ÷ U | ✓ | ✓ | ✓ |
| • Use efficient written methods to add and subtract integers and decimals, to multiply and divide integers and decimals by a one-digit integer, and to multiply two-digit and three-digit integers by a two-digit integer | | ✓ | ✓ |
| • Use a calculator to solve problems involving multi-step calculations | ✓ | ✓ | ✓ |
| • Use approximations, inverse operations and tests of divisibility to estimate and check results | ✓ | ✓ | ✓ |

## Speaking and listening objectives for the block

| Objectives | Units | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| • Use a range of oral techniques to present persuasive arguments | ✓ | | |
| • Participate in whole-class debate using the conventions and language of debate, including Standard English | | ✓ | |
| • Analyse and evaluate how speakers present points effectively through use of language and gesture | | | ✓ |

## Opportunities to apply mathematics in science

| Activities | | Units | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| 6e | Forces in action: Weigh objects in air and suspended in water. Calculate the differences between readings. Discuss patterns in data generated. | ✓ | | |
| 6c | More about dissolving: Measure the time taken for different types of sugar to dissolve; calculate time differences. | | ✓ | |
| 6e | Forces in action: Add masses to elastic bands, and calculate differences between the lengths of the elastic band when more mass is added. Use findings to predict extensions for other masses, and test these. | | | ✓ |

## Key aspects of learning: focus for the block

| | | | |
|---|---|---|---|
| Enquiry | **Problem solving** | Reasoning | Creative thinking |
| Information processing | Evaluation | **Self-awareness** | Managing feeling |
| **Social skills** | **Communication** | Motivation | Empathy |

## Vocabulary

problem, solution, calculate, calculation, equation, operation, answer, method, strategy, explain, reason, predict, relationship, rule, formula, pattern, sequence, term, consecutive, represent

place value, digit, numeral, partition, integer, decimal point, decimal place, thousandths, positive, negative, compare, order, ascending, descending, greater than (>), less than (<), round, estimate, approximate, approximately

add, subtract, multiply, divide, convert, sum, total, difference, plus, minus, product, quotient, dividend, divisor, remainder

calculator, display, key, enter, clear, constant

pound (£), penny/pence (p), note, coin, units of measurement and their abbreviations

## Building on previous learning

Check that children can already:

- explain reasoning using text, diagrams and symbols
- solve one- and two-step problems involving whole numbers and decimals and all four operations, choosing and using appropriate calculation strategies
- order positive and negative numbers in context

- explain what each digit represents in whole numbers and decimals with up to two places, and partition, round and order these numbers
- multiply and divide whole numbers and decimals by 10, 100 or 1000; multiply pairs of multiples of 10 and 100 and derive corresponding division facts
- use mental methods to find sums, differences, doubles and halves of decimals (e.g. 6.5 ± 2.7, halve 5.6, double 0.34), to multiply a two-digit by a one-digit number, to multiply by 25 and to subtract one near multiple of 1000 from another (e.g. 6070 – 4097)
- use efficient written methods to add and subtract whole numbers and decimals with up to two places, to multiply HTU × U, TU × TU and U.t × U, and to divide HTU ÷ U
- use a calculator to solve problems, interpreting the display correctly
- use rounding and inverse operations to estimate and check calculations

# Unit 6A1 2 weeks

| Objectives<br>*Children's learning outcomes in italic* | Assessment for learning |
|---|---|
| • Explain reasoning and conclusions, using words, symbols or diagrams as appropriate<br>*I can say whether a number will occur in a sequence, explaining my reasoning* | Here is a repeating pattern of shapes. Each shape is numbered.<br>  <br><br>The pattern continues in the same way. What will the 35th shape be? Explain how you can tell. |
| • Find the difference between a positive and a negative integer, or two negative integers, in context<br>*I can find the difference between positive and negative integers* | Tell me two temperatures that lie between 0 °C and –8 C. Which is the warmer? How can you tell? What is the difference between the warmer temperature and –8 C?<br>Which of these places had the greatest temperature rise? |
| • Use decimal notation for tenths, hundredths and thousandths; partition, round and order decimals with up to three places, and position them on the number line<br>*I can round large numbers to the nearest multiple of 10, 100 or 1000* | What do you look for first when you order a set of numbers? Which part of each number do you look at to help you?<br>I started with a number and rounded it to the nearest integer. The answer was 42. What number could I have started with?<br>Are there any other numbers that it could have been? What is the largest/smallest number that I could have started with? How do you know?<br>Enter 5.3 onto your calculator display. How can you change this to 5.9 in one step (operation)? Now enter 5.34 and change it to 5.39. Now enter 5.342 and change it to 5.349. |
| • Use knowledge of place value and multiplication facts to 10 × 10 to derive related multiplication and division facts involving decimals (e.g. 0.8 × 7, 4.8 ÷ 6)<br>*I can use tables facts to work out other facts with decimals* | Start from a two-digit number with at least six factors, e.g. 56. How many different multiplication and division facts can you make using what you know about 56? What facts involving decimals can you derive?<br>What if you started with 5.6? What about 11.2? |
| • Calculate mentally with integers and decimals: U.t ± U.t, TU × U, TU ÷ U, U.t × U, U.t ÷ U<br>*I can add, subtract, multiply and divide whole numbers and decimals in my head* | The answer is 12.6. What was the question?<br>Make up a question involving addition that has the answer 0.04. Now try subtraction. What about multiplication? Division?<br>How would you work out 25 × 9? And 96 ÷ 6? What is 1.3 multiplied by 4? How can you check that your answer is correct? |
| • Use a calculator to solve problems involving multi-step calculations<br>*I can use a calculator to solve problems with more than one step* | What key presses would you make on a calculator to work out 17 + 3 × 15?<br>Nicola has £50. She buys three flowerpots at £12.75 each and a spade at £9.65. How much money does she have left? Show me how you used your calculator to find the answer. |
| • Use approximations, inverse operations and tests of divisibility to estimate and check results<br>*I can estimate and check the calculations that I do* | Roughly, what will the answer to this calculation be?<br>How do you know that this calculation is probably right? Could you check it a different way?<br>Should the answer be odd or even? How do you know? |
| • Use a range of oral techniques to present persuasive argument<br>*I can use different techniques to persuade people* | John says that every multiple of 4 ends in 2, 4, 6 or 8. Persuade me that John is wrong.<br>Convince your partner that 2140 will not be in this sequence.<br>40 80 120 160 200 … |

## Learning overview

Children **count** in whole-number, fraction and decimal steps. They count forwards in jumps of 19 from 7 and backwards in 7s starting at 19 and continuing below zero. They count in thirds from 0 using mixed numbers and in steps of 0.3 from 0, and backwards in 100s from 21 and 213. They are able to identify the rule for a given **sequence**. For example, for the sequence of numbers 1, 3, 7, 15, 31, …, they are able to predict the next number by saying that you double the number and add 1 to get the next number in the sequence. Alternatively, they spot that the differences between one term and the next form the sequence 2, 4, 8, 16, … They can say whether a particular number will or won't occur in a sequence and **explain their reasoning**.

Children use a **number line** to order a set of positive and negative numbers. They find the **difference** between pairs of negative numbers, or one positive and one negative number, in context. They say that a rise from –3 °C to +1 °C shows that the temperature has risen by 4 degrees. They read a table showing temperatures in five different cities on the same day and put the temperatures in order from coldest to warmest. They find the new temperature in each city when the temperature rises by 2 degrees or drops by 5 degrees.

Children **estimate** the position of numbers on a number line. They suggest which number lies about two fifths of the way along a line from 0 to 1000 line, or a line from 0 to 1. They justify their decisions. They **round** large numbers to the nearest multiple of 10, 100 or 1000, and decimals to the nearest whole number or to one decimal place. They **decide** whether it would be appropriate to round the number of children in a school, marbles in a jar, grains of sand in a bucket or hairs on a dog to the nearest 10, 100, 1000 or 10 000. They partition and order decimals with up to three places.

Children use **mental strategies** to calculate in their heads, using **jottings** and/or **diagrams** where appropriate. For example, to calculate 24 × 15, they multiply 24 × 10 and then halve this to get 24 × 5, adding these two results together. They record their method as (24 × 10) + (24 × 5). Alternatively, they work out 24 × 5 = 120 (half of 24 × 10), then multiply 120 by 3 to get 360. To solve 5.6 – □ = 1.9, they use their ability to add or subtract any pair of two-digit numbers and their knowledge of inverse operations to work out 56 – 19. This tells them that the unknown number is 3.7. They can also show the calculation on a number line. They start at 5.6, jump back 3.6 to 2.0, and then 0.1 to 1.9, adding these two jumps to find the solution (3.7). They **compare these different methods** and discuss which they prefer. They recognise that mental calculations need to be reasonably quick and, of course, accurate, and that jottings can range from jotting down an interim result to drawing an informal diagram.

Children consolidate the use of **efficient written methods** for multiplication and division of decimal numbers by one-digit whole numbers, such as 23.8 × 8 and 87.6 ÷ 6, building on and refining the methods for multiplication and division developed in Year 5. They find an approximation for each calculation first and use this to check that the answer is sensible.

Children use a **calculator** to explore the effect of brackets in calculations. They compare (17 + 3) × 15 and 17 + (3 × 15) and explain why the answers are different. They place brackets to make a calculation correct; for example, they write 250 – 45 ÷ 3 = 235 as 250 – (45 ÷ 3) = 235.

Children **solve problems** such as: *A number multiplied by itself gives 2809. Find the number.* They decide for themselves whether to use a calculator.

# Unit 6A2 2 weeks

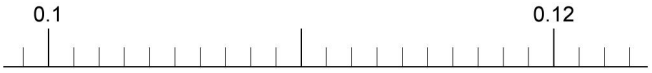
| Objectives<br>*Children's learning outcomes in italic* | Assessment for learning |
|---|---|
| • Explain reasoning and conclusions, using words, symbols or diagrams as appropriate<br>*I can explain my reasoning and conclusions, using symbols to represent unknown numbers* | I am thinking of a number. If you add 3 to my number and then multiply the result by 5, the answer is 35. What is my number? Show me how you worked it out.<br>Nadia is working with whole numbers. She says: 'If you add a two-digit number to a two-digit number you cannot get a four-digit number.' Is she correct? Explain why. |
| • Solve multi-step problems, and problems involving fractions, decimals and percentages; choose and use appropriate calculation strategies at each stage, including calculator use<br>*I can solve problems involving more than one step* | How do you know whether you need to add, subtract, multiply or divide? What clues do you look for?<br>How did you decide what to do first?<br>Make up a word problem that could be solved using these calculations:<br>2 m – (24.2 cm × 5)<br>(£30.35 + £47.11) ÷ 6<br>2 hours – 45 minutes |
| • Use decimal notation for tenths, hundredths and thousandths; partition, round and order decimals with up to three places, and position them on the number line<br>*I can use decimals with up to three places and order them on a number line*<br>*I can round decimals to the nearest whole number or the nearest tenth* | The distance to the park is 5 km when rounded to the nearest kilometre. What is the greatest/least distance it could be? How would you give somebody instructions to round distances to the nearest kilometre?<br>What did you look for first when you ordered these numbers? Which part of each number did you look at to help you? What do you do when numbers have the same digit in the same place?<br>Can you explain this to me using a number line?<br>Which numbers did you think were the hardest to put in order? Why?<br>Tell me a number that lies between 3.12 and 3.17. Which of the two numbers is it closer to? How do you know? |
| • Use knowledge of place value and multiplication facts to 10 × 10 to derive related multiplication and division facts involving decimals (e.g. 0.8 × 7, 4.8 ÷ 6)<br>*I can use tables facts to work out other facts with decimals* | You know that 42 ÷ 6 = 7. What other division and multiplication facts can you derive from this?<br>Multiply 7 by 0.6.<br>What number multiplied by 8 equals 4.8? |
| • Calculate mentally with integers and decimals: U.t ± U.t, TU × U, TU ÷ U, U.t × U, U.t ÷ U<br>*I can add, subtract, multiply and divide whole numbers and decimals in my head* | The answer is 18.6. What is the question?<br>Look at these calculations with two-digit decimals. Tell me how you could work them out in your head.<br>What other method could you use for this mental calculation? |
| • Use efficient written methods to add and subtract integers and decimals, to multiply and divide integers and decimals by a one-digit integer, and to multiply two-digit and three-digit integers by a two-digit integer<br>*I can add, subtract, multiply and divide whole numbers and decimals using efficient written methods* | Look at these long-multiplication calculations. They have mistakes in them. Tell me what is wrong with each calculation. How should it be corrected?<br>Make up an example of an addition or subtraction involving decimals that you would do in your head and one that you would do on paper. Explain why. |

| Objectives<br>*Children's learning outcomes in italic* | Assessment for learning |
|---|---|
| • Use a calculator to solve problems involving multi-step calculations<br>*I can use a calculator to solve problems involving more than one step* | My calculator shows:<br>  <br>My question was about money. Complete this:<br>3.5 means £3 and … pence.<br>What if my question was about length? Complete this:<br>3.5 means 3 metres and … centimetres.<br>What if my question was about weight? Complete this:<br>3.5 means 3 kilograms and … grams. |
| • Use approximations, inverse operations and tests of divisibility to estimate and check results<br>*I can estimate and check the result of a calculation* | What would be the best approximation to work out 4.4 × 18.6? Give your reasons.<br>Roughly, what answer do you expect to get? How did you arrive at that estimate? Do you expect your answer to be greater or less than your estimate? Why?<br>This answer is wrong. How can you tell?<br>Find two different ways to check the accuracy of this answer.<br>Should the answer be a multiple of 5? How could you check? |
| • Participate in a whole-class debate using the conventions and language of debate<br>*I can take part in a whole-class debate* | Debate with the class the advantages and disadvantages of different methods of multiplying 23 by 16. |

## Learning overview

Children use **decimal notation** for tenths, hundredths and thousandths. They **partition** numbers with up to three decimal places. They state the value of the digit 4 in the number 13.648 and recognise that you add 2 tenths to the number 5.235 to make 5.435. They replace the digit 6 with a 0 by subtracting 0.6 from 13.648 on a calculator.

Children **count** in steps of 0.1, 0.01 and 0.001, e.g. 2.4, 2.41. 2.42, 2.43, …, 2.49, 2.5. They **order** numbers with up to three decimal places and position them on a **number line**. For example, they locate 0.111 on this line.




Children **round** decimal numbers to the nearest whole number and to the nearest tenth; for example, they round a set of given lengths to the nearest centimetre or millimetre. They use rounding to estimate the answer to calculations such as 17.15 – 8.9, by using the **approximation** 17 – 9 = 8. They calculate mentally problems such as:

*A length of ribbon is 2.4 m long. I need to cut it into three equal pieces. What is the length of each piece?*

*The dimensions of my garden are 6.7 m by 6 m. What is its area?*

Children find the unknown number in an **equation** such as 0.215 + □ = 0.275, using their knowledge of **place value** and using an **inverse operation** to check. They explain their reasoning: 'I compared the two numbers and realised that the difference between them was 6 hundredths, so I added 0.06 to 0.215 to check.'

Before they use a **written method** to add and subtract decimal numbers, children estimate the answer. For example, they calculate 13.86 + 9.481 or 0.236 – 0.154, and use rounding to check that their answer is approximately 23 or 0.08.

$$\begin{array}{r} 13.86 \\ +\ 9.481 \\ \hline 23.341 \\ {\scriptstyle 1\,1\ \ 1} \end{array}$$

$$\begin{array}{r} 0.236 \\ -\ 0.154 \\ \hline 0.046 \\ 0.036 \\ \hline 0.082 \\ {\scriptstyle 1} \end{array} \begin{array}{l} \\ \\ \\ \rightarrow 0.2 \\ \rightarrow 0.236 \\ \\ \end{array}$$

or

$$\begin{array}{r} {\scriptstyle 1\,1} \\ 0.2\not{3}6 \\ -\ 0.154 \\ \hline 0.082 \end{array}$$

Children discuss the **efficiency** of their written methods. They consider different calculations and choose the **appropriate method**: an efficient written method, a mental method (with jottings if necessary), or a calculator. They use their calculators to solve 'missing-number' problems, using their knowledge of **inverse operation**s:

$4.2 = \square \times 7$

$500 \div \square = 25$

$\square \times 5.1 = 34.17$

*What number multiplied by itself gives 400?*

Children solve **multi-step problems**, including some with negative numbers or decimals, explaining and evaluating their choices, and approximating first:

*By midday the temperature rose to 8 °C. By midnight it dropped to –4 °C. What was the temperature difference between midday and midnight? The temperature regained half of its drop (from midday to midnight) by 6:00 am the following morning. What was the temperature at 6:00 am?*

*Two adults and two children go to a cinema. Adult tickets are £5.85 and children's tickets are £2.85. How much change will they get from a £20 note?*

Children **record** stages of solving the problems, explaining clearly the calculations that they have done. They **compare and evaluate different methods**, discussing the **appropriateness** and **efficiency** of their chosen method.

# Unit 6A3 2 weeks

| Objectives<br>*Children's learning outcomes in italic* | Assessment for learning |
|---|---|
| • Explain reasoning and conclusions, using words, symbols or diagrams as appropriate<br>*I can explain my reasoning and conclusions, using symbols to represent unknown numbers* | The rule for this sequence of numbers is 'add 3 each time'.<br>1 4 7 10 13 16 …<br>The sequence continues in the same way. I think that no matter how far you go there will never be a multiple of 3 in the sequence. Am I correct? Explain how you know.<br>What is the value of $4x + 7$ when $x = 5$? Explain how you know. |
| • Solve multi-step problems, and problems involving fractions, decimals and percentages; choose and use appropriate calculation strategies at each stage, including calculator use<br>*I can solve problems involving more than one step*<br>*I can explain the reason for my choice of method and say whether I think it was effective* | What are important things to remember when you solve word problems?<br>What clues do you look for in the wording of questions? What words mean you need to add, subtract, multiply or divide?<br>Make up two different word problems for each of these calculations. Try to use a variety of words.<br>(17 + 5) × 6<br>12.5 ÷ 5 – 0.25 |
| • Use decimal notation for tenths, hundredths and thousandths; partition, round and order decimals with up to three places, and position them on the number line<br>*I can use decimals with up to three places and order them on a number line*<br>*I can partition decimals with three places* | Write a number in the box to make this correct.<br>0.627 = 0.6 + 0.02 + □<br>What number is exactly halfway between 1.1 and 1.2?<br>Which of these numbers is closest in value to 0.1?<br>0.01 0.05 0.11 0.2 0.9<br>How can you tell?<br>Tell me a number with two/three decimal places that rounds to 5.0 when rounded to the nearest tenth. |
| • Calculate mentally with integers and decimals: U.t ± U.t, TU × U, TU ÷ U, U.t × U, U.t ÷ U<br>*I can add, subtract, multiply and divide whole numbers and decimals in my head* | Make up a question involving addition that has the answer 1.35. Now try subtraction. What about multiplication? Division?<br>How can you use factors to multiply 17 by 12?<br>Which of these subtractions can you do without writing anything down? Why is it possible to solve this one mentally? What clues did you look for? What is the answer to the one that can be solved mentally? |
| • Use efficient written methods to add and subtract integers and decimals, to multiply and divide integers and decimals by a one-digit integer, and to multiply two-digit and three-digit integers by a two-digit integer<br>*I can use efficient written methods to add, subtract, multiply and divide integers and decimal numbers*<br>*I can calculate the answer to HTU ÷ U and U.t ÷ U to one or two decimal places* | Two numbers have a difference of 1.583 One of the numbers is 4.728. What is the other? Is this the only answer?<br>Look at these calculations. Which of them is incorrect? Why?<br>12.4 × 6.6 = 71.23<br>48.6 ÷ 3 = 16.2<br>Work out 32.75 – 1.837. Explain each step to me.<br>What tips would you give to someone to help with long multiplication of HTU × TU? |
| • Use a calculator to solve problems involving multi-step calculations<br>*I can use a calculator to solve problems with more than one step* | Printing charges for a book are 3p per page and 75p for the cover. I paid £4.35 to get this book printed. Work out on your calculator how many pages there are in the book. Write down the calculations that you did.<br>Seeds are £1.45 for a packet. I have £10 to spend on seeds. What is the greatest number of packets I can buy? Show me how you used your calculator to find the answer. |

| Objectives<br>*Children's learning outcomes in italic* | Assessment for learning |
|---|---|
| • Use approximations, inverse operations and tests of divisibility to estimate and check results<br>*I can estimate and check the result of a calculation* | I added three odd numbers and my answer was 50. Explain why I cannot be correct.<br>Roughly, what answer do you expect to get? How did you arrive at that estimate?<br>Is this calculation correct? How do you know?<br>What inverse operation could you use to check this result?<br>Should the answer be a multiple of 3? How could you check? |
| • Analyse and evaluate how speakers present points effectively through use of language, gesture, models and images<br>*I can listen to someone explain their method or solution to a problem, and evaluate whether their explanation made sense* | Discuss the explanation and images used by someone explaining to the class how they solved a word problem. Could the explanation have been improved?<br>What could you use to help you explain your conclusions? Would a table, picture or diagram help? |

## Learning overview

Children use decimal notation in a variety of contexts, drawing on their knowledge of measures. They **order** a set of decimal numbers or measures, **explaining their reasoning,** for example, explaining that 3.2 is greater than 3.12 because 2 tenths is greater than 1 tenth, or 20 hundredths is greater than 12 hundredths. They relate this to 3 kilograms 200 grams being greater than 3 kilograms 120 grams. They can give a decimal number lying between 3.51 and 3.52, for example, and say the number lying halfway between 0.864 and 0.868 or halfway between 1.72 and 1.73. They use a calculator to change 530 to 5.3 or 0.62 to 620 in one step.

Children use **place value** and **partitioning** to calculate mentally, for example 3.85 + □ = 5, 1.2 × 9, 4.5 ÷ 3. They work out 85 – 29 = 56 to generate **linked facts** such as 29 + 56 = 85, 8.5 – 2.9 = 5.6, 0.85 – 0.29 = 0.56. They calculate 23 × 7 and 2.3 × 7 and explain the relationship; similarly with 95 ÷ 5 and 9.5 ÷ 5. They use facts like these to **solve mental word problems**, such as:

*A bill of £9.50 is shared equally between 5 people. How much does each person pay?*

Children use a **calculator** to **investigate general statements** such as 'dividing a number by 0.5 makes it twice as big' or 'finding 25% of an amount is the same as dividing by 4'.

Children apply **efficient written methods** to add, subtract, multiply and divide integers and decimal numbers in a variety of problem-solving contexts. For example, they work out the cost of carpeting different rectangular bedrooms with carpet at £12.97 per square metre. They calculate the answers to HTU ÷ U and U.t ÷ U to one or two decimal places, for example cutting up a total length of 17.3 m of curtain material into five equal lengths, checking their calculation using inverses.

Children **solve multi-step problems** involving money, measures and time, choosing and using appropriate and efficient methods at each stage, including a calculator. They **convert between units** of measure where appropriate and give answers in a suitable unit and to a suitable degree of accuracy, including questions where division needs to be rounded up or down and where quotients can be given exactly using decimals or fractions. For example, they solve problems such as:

*I buy 3 large pizzas costing £10.95 each and 2 small pizzas costing £7.69 each. How much do I spend altogether?*

*A session at a gym club lasts for 1 hour and 15 minutes. To move up to an advanced group, children have to attend sessions for 675 minutes. For how many weeks will children have to attend before they can progress to the advanced group?*

*A carpenter needs to cut a plank of wood which is 3.73 m into five equal pieces. What is the length of each piece in centimetres?*

*Every day a machine makes 100 000 paper clips which go into boxes. A full box has 120 paper clips. How many full boxes can be made from 100 000 paper clips? Each paper clip is made from 9.2 centimetres of wire. What is the greatest number of paper clips that can be made from 10 metres of wire?*

*A DJ has storage boxes for her CDs, which are in two sizes. Small boxes hold 15 CDs. Large boxes hold 28 CDs. The DJ has 411 CDs. How could the DJ pack her CDs?*

Children use **rounding** to find an approximate answer as a check. They also check answers to calculations using their knowledge of **tests of divisibility**.