Activity name	Learning objectives	Managing the homework
A1		
<b>Divide me</b> Estimate first, then divide a number by U or TU to reach a given target.	Use approximations, inverse operations and tests of divisibility to estimate and check results	<ul><li>Before: Remind the children of the importance of estimating before carrying out calculations.</li><li>After: Check through some of the children's answers. How did estimating first help them to decide which pair of numbers to divide?</li></ul>
Positive and negative Use a number line to solve number sequence problems involving positive and negative integers.	Find the difference between a positive and a negative integer, or two negative integers	<b>Before:</b> Revise positive/negative number work. Remind the children to use the number line to physically count the steps. <b>After:</b> Work through the answers. Which problems did the children find easiest/hardest? Discuss everyday uses of positive/negative numbers.
<b>Guitar Genius</b> Order decimals with up to three places in the context of a computer game.	Order decimals with up to three places, and position them on the number line	<b>Before:</b> Brief the children on the technique for ordering decimals. <b>After:</b> Check the answers with the class. Discuss any problems encountered.
<b>Decimal dash!</b> Multiply and divide decimals in the context of a speed test.	Use knowledge of place value and multiplication facts to $10 \times 10$ to derive related multiplication and division facts involving decimals (for example, $0.8 \times 7$ , $4.8 \div 6$ )	<b>Before:</b> Tell the children that they will use their knowledge of multiplication and related division facts to complete this activity. <b>After:</b> Go through the answers and compare times for successfully completed tests.
A2		
<b>One of each</b> Pair numbers and multiply them on the calculator to find given totals.	<ul> <li>Solve problems involving decimals; choose and use appropriate calculation strategies, including calculator use</li> <li>Use a calculator to solve problems</li> </ul>	<b>Before:</b> Explain that one number has to be taken from each set of shapes to make the given total. Encourage the children to make a sensible guess first. Check that calculators are available at home. <b>After:</b> Check through the solutions. How accurate were the estimates? How did the estimates help the children to find the correct numbers?
<b>On the grid</b> Approximate first and then use the grid method to work through examples of HTU × TU.	Use efficient written methods to multiply three-digit integers by a two-digit integer	<b>Before:</b> Ensure that the children fully understand the grid method. Work through the example on the sheet. <b>After:</b> Discuss the advantages and disadvantages of the grid method. How does it compare with other methods the children have tried?
What's missing? Look carefully at word problems and decide what information needs to be added in order to find each solution. Complete the calculations using own information.	Solve multi-step problems and problems involving decimals; choose and use appropriate calculation strategies at each stage, including calculator use	<b>Before:</b> Revise the step-by-step approach used for solving problems. Remind the children that they will have to provide some of their own numbers to find the solution. <b>After:</b> Check through the information the children provided themselves. How many variations are there for each question? Discuss the methods used to find solutions.
Missing digits Substitute missing digits in number sentences involving decimal numbers.	Use efficient written methods 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	<b>Before:</b> Ensure that the children have a clear understanding of the four operations using decimal numbers. Talk to them about finding missing numbers, often using the inverse operation. <b>After:</b> Go through the questions and discuss the various strategies the children used. How did they check their answers?