Solving Multiplication and Division: Maths : Year 5 : Spring Term

|  | Learning Objective | Overview | Assessment Questions | Resources |
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| Lesson 1 | To know how to use the short division method | In this first lesson, children are introduced to the formal method of short division. As a class, they will work through several examples where a two-digit number is divided by a one-digit number, moving on to including examples where exchanging is needed and remainders are part of the final answer. In their independent activities, children will practise this skill by solving given number sentences and matching up dividends, divisors and quotients to create correct number sentences. In the alternative activity, they compare the short division method with the chunking method. | - Can children explain how to use the short division method? <br> - Can children divide a two-digit number by a one-digit number using the short division method? <br> - Can children solve number sentences using the short division method that involve exchanging and remainders? | - Slides <br> - Worksheet 1A/1B/1C <br> - Division Cards (FSD? activity only) <br> - Chunking vs Short Division Game (FSD? activity only) <br> - Thought Bubble Cards (FSD? activity only) |
| Lesson 2 | To know how to use the short division method for three-digit numbers divided by one-digit numbers | Children will continue to develop their knowledge and understanding of the short method for division by using numbers with larger dividends. They will learn what to do when a number in the dividend is smaller than the divisor, and understand how to solve number sentences that include a zero. Independently, children will check answers and identify errors in given number sentences. In the FSD? activity, children find missing digits in given short division methods. Each digit corresponds to a letter which will spell out the punchline of a joke. | - Can children divide a three-digit number by a one-digit number using the short division method? <br> - Can they identify and correct errors in given short division methods? <br> - Can children explain their reasoning clearly? | - Slides <br> - Quality Control Card <br> - Worksheet 2A/2B/2C <br> - Robotic Jokes Sheet (FSD? activity only) |
| Lesson 3 | To know how to write and interpret remainders | In this lesson, children will focus on the remainder, and what this figure actually means. They will learn that, when solving word problems, sometimes the remainder needs to be used in the answer, and sometimes it does not. As a class they will look at different word problems and discuss how to interpret the remainder in each one. In their independent activities, children will sort and solve a variety of word problems based on interpretation of the remainder. | - Do children understand what a remainder is? <br> - Can children write a remainder as a fraction or decimal? <br> - Can children interpret remainders in a given context? | - Slides <br> - Card Set $A / B / C$ <br> - Worksheet 2A/2B/2C <br> - Build-a-Bot! Game Board (FSD? activity only) <br> - Question Cards (FSD? activity only) <br> - Instructions Cards (FSD? activity only) <br> - Bot Bits (FSD? activity only) <br> - Bot Body Card (FSD? activity only) <br> - Whiteboards, dice (FSD? activity only) |
| Lesson 4 | To know how to interpret and create scaled drawings | Children will use their knowledge and understanding of multiplication and division to scale up and scale down given measurements of different objects. In their independent activities, children will increase and decrease the size of different robot parts. In the alternative activity, they are challenged to see how many 2D shapes they can measure, then scale up or down to fit on their worksheet. | - Can children use multiplication to scale up given measurements? <br> - Can children use division to scale down given measurements? <br> - Do children know some of the real-life applications of scaled drawings? | - Slides <br> - Worksheet 4A/4B/4C <br> - Robot Card A/B/C <br> - 10mm Squared Paper <br> - Challenge Cards (FSD? activity only) <br> - Challenge Sheet (FSD? activity only) |
| Lesson 5 | To be able to solve problems involving simple rates | In this final lesson, children will learn what a rate is, and how to find the unit rate when comparing two different quantities. As a class, they will use their knowledge and skills of division and multiplication to answer various problems involving rates. Children will continue to apply this skill in their independent activities. In the alternative activity, children compare supermarket offers by finding the unit price of different products, and then working out which is the cheapest shop overall. | - Can children find the unit rate when comparing two quantities? <br> - Can children use the unit rate to work out other rates? <br> - Can children explain their reasoning? | - Slides <br> - Worksheet 5A/5B/5C <br> - Battle of the Bargains! Sheet (FSD? activity only) <br> - Worksheet 5D (FSD? activity only) |

