Formal Multiplication: Maths : Year 5 : Summer Term

|  | Learning Objective | Overview | Assessment Questions | Resources |
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| Lesson 1 | To use the grid method of multiplication to solve multiplication problems. | Children will recap how to use the grid method to solve multiplication calculations, starting with simple calculations and moving on to solve three-digit by two-digit and four-digit by two-digit calculations. <br> They have some 'sometimes, always or never' statements and target numbers to investigate. They will also think about how they can work out what the question is when they are given a completed grid using their knowledge of multiplication facts. | - Can children find the answer to two-digit by one-digit multiplications using the grid method? <br> - Can children find the answer to two-digit by two-digit multiplications using the grid method? <br> - Can children find the answer to three-digit by two-digit multiplications using the grid method? | - Slides <br> - Worksheet 1A <br> - Sometimes, Always, Never Cards 1A/1B/1C <br> - Question Cards (FSD? activity only) <br> - Digit Cards (FSD? activity only) <br> - Calculators |
| Lesson 2 | To use the expanded standard method to solve multiplication problems. | Children will compare the expanded and grid methods to identify similarities and differences. They will learn how to use the expanded method to multiply two-, three- and four-digit numbers by a single digit. They can solve missing number problems by filling in the gaps in expanded method calculations. | - Can children answer two-digit by one-digit multiplication questions using the expanded standard method? <br> - Can children answer three-digit by one-digit multiplication questions using the expanded standard method? <br> - Can children answer four-digit by one-digit multiplication questions using the expanded standard method? | - Slides <br> - Worksheet 2A/2B/2C <br> - Calculation Cards A/B (FSD? activity only) |
| Lesson 3 | To use the formal short multiplication method to solve multiplication problems. | Children will compare the expanded method and formal short multiplication method to identify similarities and differences. They will recap how the short multiplication method works and use short multiplication to multiply two-, three- and four-digit numbers by a single digit, including to solve word problems. | - Can children use the formal short multiplication method to solve two-digit by one-digit calculations? <br> - Can children use the formal short multiplication method to solve three-digit by one-digit calculations? <br> - Can children use the formal short multiplication method to solve four-digit by one-digit calculations? | - Slides <br> - Worksheet 3A/3B/3C <br> - Domino Cards 3A/3B (FSD? activity only) <br> - Blank Dominos (FSD? activity only) |
| Lesson 4 | To use the formal long multiplication method to solve multiplication problems. | Children will learn how to use the formal method of long multiplication. They will be taken through each step of the process, building on their understanding of the short multiplication method to help them. | - Can children use the formal long multiplication method to solve two-digit by two-digit calculations? <br> - Can children use the formal long multiplication method to solve three-digit by two-digit calculations? <br> - Can children use the formal long multiplication method to solve four-digit by two-digit calculations? | - Slides <br> - Worksheet 4A/4B/4C <br> - Calculation Cards 4A/4B/4C (FSD? activity only) <br> - Dice (FSD? activity only) |
| Lesson 5 | To be able to use formal multiplication methods to solve problems. | Children will recap how to use long multiplication then recap which other methods they have used throughout the week to solve multiplication problems. They will choose an appropriate method to solve a variety of word problems and investigations. | - Can children use a variety of formal multiplication methods? <br> - Can children choose a method appropriate to the problem? <br> - Can children solve multiplication problems using a formal method? | - Slides <br> - Worksheet $5 \mathrm{~A} / 5 \mathrm{~B} / 5 \mathrm{C}$ <br> - Price Sheet $5 \mathrm{~A} / 5 \mathrm{~B}$ <br> - Challenge Cards 5A/5B (FSD? activity only) |

