	Addition	Subtraction	Multiplication	Division
Yr 6	Children should extend the carrying method to calculations with any number of digits, 7648 + 1486 = 9134 (111) 6584 + 5848 = 12432 (111) 42 + 6432 + 786 + 3 = 11944 (121) **Using similar methods children will:** Add several numbers with different numbers of digits Begin to add two or more decimal fractions with up to four digits and either one or two decimal places Know that the decimal points should line up under each other, particularly when adding or subtracting mixed amounts, e.g. 401.2 + 26.85 + 0.71 **Practise the use of the bar model to add algebra**	Regrouping Th H T O 9 7 6 3 - 1 3 7 9 8 3 8 4 Children should: - be able to subtract numbers with different numbers of digits - Be able to subtract two or more decimal fractions with up to three digits and either one or two decimal places - Know that decimal points should line up under each other **Practise the use of the bar model to subtract algebra**	**See Y5 for previous steps** **Informal method** Grid method four digit by one digit Th H TO x O (short multiplication - four digit multiplication by a single digit) **4346 X 8 = 34768** | X | 4000 | 300 | 40 | 6 | | 8 | 32000 | 2400 | 320 | 48 | Moving on to HTO X TO Long multiplication - multiplication by more than a single digit **372 X 24 = 8928** | X | 300 | 70 | 2 | | 20 | 6000 | 1400 | 40 | | 4 | 1200 | 280 | 8 | **Moving on to formal compact column method** 72 X 38 = 2160 + 576 = 2736 **Multiplying decimals** Using similar methods, they will be able to multiply decimals with up to two decimal places by a single digit number and then two digit numbers, approximating first. They should know that the decimal points line up under each other. 4.92 X 3 = is approximately 15 and the answer to the calculation is 12.76 | X | 4 | 0.9 | 0.02 | | 3 | 12 | 2.7 | 0.06 | Move on to the formal column method **Practise the use of the bar model to multiply algebra**	Children will continue to use written methods to solve short division **TO ÷ O and HTO ÷TO** **Long division HTO ÷ TO** **972 ÷ 36** 27 36) 972 - 720 (20 x 36) 252 - 252 (7 x 36) 0 **Use WIK sheet** **1 X 36 =3 6** **2 X 36 = 72** **4 X 36 = 144** **5 X 36 = 180** **8 X 36 = 288** **10 X 36 = 360** **Any remainders should be as fractions E.g. If the children were dividing 32 by 10, the answer should be shown as 3 2/10 which could then be written as 3 ⅕ in its lowest terms. Some children need the short division method:** 16 r 3 7) 11 4 5 **Extension:** **Extend to decimals with up to two decimal places. Children should know that decimal places line up under each other** 9. 5 5) 4 7. 5 2 5 0