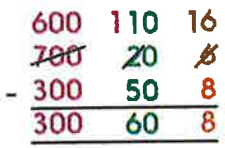
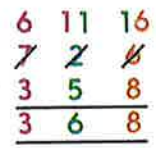
Y4	National Curriculum	Addition	Subtraction	Models and images	Maths Talk
	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate Estimate and use inverse operations to check answers to a calculation Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why Solve simple measure and money problems involving fractions and decimals to 2 decimal places	Know number bonds to multiples of 10 & 100 addition & subtraction facts; e.g. 432 + ? = 500 Use mental strategies to add and subtract (***whole numbers to 4-digits and decimal numbers to tenths***)   • Place value partitioning (no work calculations) 3050 – 1010 or 6.5 – 2.3 • Multiples and near multiples of 10 and 100 (rounding & adjusting) • Partitioning • Near doubles 252 + 250 (rounding & adjusting) • Counting on & back in 0.1s/1s/10s/100s/1000s **Estimate/approximate - Number nonsense/number sense** e.g. 432 – 297 = 265? (297 is nearly 300!)	Concrete apparatus numicon, multilink, Dienes blocks, Bead bar Number lines Empty number lines 100 grid PV grid Bar model Part part whole (fractions/decimals)	Fish n chip numbers (74 n 26 ...) Frog – hopping up from smaller to larger number; 2, 3 or 4 hops? bond to 10, bond to next multiple of 10, 100, etc. 'Easy-peasy no-work calculations' 'Number sense number non-sense' extra tens/hundreds (written addition) Moving tens (written subtraction)
		Written method: Column addition to add two or three whole numbers with up to 4 digits some answers of 5,digits. 1000 400 60 8 + 4000 800 60 6 1000 100 10 6000 300 30 4 5347 2286 + 1495 121 9128 £3 20p 4p £2 50p 8p £5 70p 12p £5.82 £3.24 + £2.58 1 £5.82 Add like fractions, e.g. $^3/_5 + ^4/_5 = ^7/_5 = 1\ ^2/_5$. Be confident with fractions that add to 1 and fraction complements to 1. (E.g. $^2/_3 + ? = 1$) **Choose the most efficient method**	Subtract by counting up (frog). E.g. 503 – 368 is done by adding: 368 +2 +30 +100 +3 so we added 135. Subtract, when appropriate, by counting back or taking away, using place value and number facts. Subtract £1, 10p, 1p from amounts of money Find change from £10, £20 and £50. **Written method: Frog** Use complementary addition (frog) to subtract amounts of money, E.g. £7.30 – £3.55 as +5p +40p +£3.30 = £3.75  £3.55 £3.60 £4.00 £7.30 and for subtractions where the larger number is a near multiple of 1000 or 100 E.g. 2002 – 1865 is +5 +30 +102 = 137  1865 1870 1900 2002		

			Written method: Use expanded column subtraction for 3-digit and 4-digit numbers (use Dienes blocks to teach) Expanded column subtraction.  Begin to use column subtraction.  Subtract like fractions, e.g. ¼ + $^1/_8$ = $^3/_8$ Use fractions that add to 1 to find fraction complements to 1, e.g. 1 – $^2/_3$ = $^1/_3$ **Choose the most efficient method**		