

Mental Objectives

| Year Four | Year Five | Year Six |
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| <ul style="list-style-type: none"> • Read and write whole numbers up to 10 000 & 100 000. • Round any three-digit number to the nearest 10, 100, 1000. • Find 1000 more or less than a given number • Count in multiples of 6, 7, 9, 25 and 1000 • Count backwards through zero to include negative numbers • Recognise place value in a 4 digit number • Read roman numerals to 100 • To mentally multiply/divide a round hundreds number by a single digit (eg 300 x3) • To recognise & use factor pairs • To find decimal equivalents for $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ etc • To divide whole integers 10 and 100 (to create decimals) • To round decimal to a whole number • To order decimals (up to 2 dp) • Mentally Add/subtract including 3 and 4 digit numbers eg 4512 – 300) • Add and subtract decimals to 2 decimal places mentally • Derive doubles of whole numbers to 100, | <ul style="list-style-type: none"> • Read write order & compare whole numbers up to 1 000 000. • Count on/back in equal steps (25, 100, 0.1, 0.2), including beyond zero. • Count on & back in steps of powers of 10 for any given number up to 1 000 000 • Count forwards backward in positive & negative numbers • Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 • Read roman numerals to 1000 & recognize years written in roman numerals • Mentally add & subtract increasingly larger numbers up to 4 and 5 digit numbers (e 12462 – 2300) • Add and subtract decimals to 2 decimal places mentally • Identify multiples and factors of numbers • To know & use prime, square & cube numbers • To multiply and divide mentally • To multiply whole & decimal numbers by 10, 100, & 1000 • To change fraction to equivalent decimals and percentages • To use decimals to 3 dp & relate them to | <ul style="list-style-type: none"> • Read and write whole numbers up to 10 000 000. • Round any whole numbers to nearest 10,100,1000 etc etc. • Round decimals to nearest whole number or nearest tenth/hundreth. • Add/subtract/multiply divide increasingly large numbers up to tens thousands • Factors, multiples, primes, squares, square roots, cubes • BODMAS. • Find fraction/percentage/ decimal equivalents. • Find pairs with any sum; multiples of 25/50/ 100/1000 to any sum; decimals with any sum eg 1, 10, 0.1 • Recall multiplication and division facts to 12 x 12. • Use doubling or halving • Multiply or divide whole numbers & numbers to 3 dp by 10, 100 or 1000, 10000. • Add/subtract positive and negative numbers • Convert between km, m, cm, mm km and mm, kg and g, litres and millilitres . • Order positive and negative numbers; order |

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| <p>corresponding halves.</p> <ul style="list-style-type: none"> • Recall multiplication facts for all tables up to 12 x 12 • Derive doubles of multiples of 10 to 500, corresponding halves • Derive doubles of multiples of 100 to 5000, corresponding halves. • Halve and quarter numbers and amounts • Find equivalents between money • To convert between analogue & digital time • To convert between equivalent measures of length, mass & volume • Derive addition pairs that total 100, and multiples of 50 that total 1000. • Sequences • Multiply a simple decimal by a single digit • Add a 4 digit, a 2 digit & a 3 digit number together mentally | <p>tenths, hundredths thousandths</p> <ul style="list-style-type: none"> • Find decimal pairs with sum of 1, 10 etc • Double or halve any whole number • Recall multiplication & division facts to 12 x 12 • Round decimals with 2 dp to nearest whole number/ tenth. • Order fractions. • Convert between equivalent measures • Order positive and negative whole numbers; • Use doubling and halving to multiply or divide two-digit numbers by 4. • Multiply a simple decimal by a single digit • Add a 4 digit, a 2 digit & a 3 digit number together mentally • Calculating % on a calculator • Number problems involving inverse operation • Find fraction of number • Find % of amount and measure • Multiply and divide a 3 digit number by a 2 digit number | <p>fractions; mixed decimals.</p> <ul style="list-style-type: none"> • Count on/back in steps of 25, 0.2, 0.25, 0.5... • Add several single-digit numbers. • Find doubles/halves of decimals, e.g. 7.9×2, $0.9 \div 2$, $0.72 \div 2$. • Convert between hours, minutes, seconds. • Add and subtract decimals with different decimal places • Find fraction of number • Find % of amount and measure • Properties of 2 & 3d shape • Calculating angles, estimating angles, internal angles of shape |
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