



Kinsley Academy Mathematics - Objectives - Year 4



	Number				Geometry & Measurement			
POS	Number and place	Addition and subtraction	Multiplication and division	Fractions (including decimals)	Measurement	Properties of shapes	Position and direction	Statistics
LO	<p>1. -count in multiples of 6, 7, 9, 25 and 1000.</p> <p>2. -find 1000 more or less than a given number.</p> <p>3. -count backwards through zero to include negative numbers.</p> <p>4. -recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).</p> <p>5. -order and compare numbers beyond 1000.</p> <p>6. -identify, represent and estimate numbers using different representations.</p> <p>7. -round any number to the nearest 10, 100 or 1000.</p> <p>8. -solve number and practical problems that involve all of the above and with increasingly large positive numbers.</p> <p>9. -read Roman numerals to 100 (I to C) and know how that, over time, the numeral system changed to include the concept of zero and place value.</p>	<p>10. -add and subtract numbers with up to 4 digits using the efficient written methods of columnar addition and subtraction where appropriate.</p> <p>11. estimate and use inverse operations to check answers to a calculation.</p> <p>12. - solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p>	<p>13. -recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math>.</p> <p>14. -use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.</p> <p>15. -recognise and use factor pairs and commutativity in mental calculations.</p> <p>16. -multiply two-digit and three-digit numbers by a one-digit number using formal written layout.</p> <p>17. -solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one-digit, integer scaling problems and harder correspondence problems such as which n objects are connected to m objects.</p>	<p>18. -recognise and show, using diagrams, families of common equivalent fractions.</p> <p>19. -count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.</p> <p>20. -solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.</p> <p>21. -add and subtract fractions with the same denominator.</p> <p>22. -recognise and write decimal equivalents of any number of tenths or hundredths.</p> <p>23. -recognise and write decimal equivalents to <math>\frac{1}{4}</math>; <math>\frac{1}{2}</math>; <math>\frac{3}{4}</math></p> <p>24. -find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths.</p> <p>25. -round decimals with one decimal place to the nearest whole number.</p> <p>26. -compare numbers with the same number of decimal places up to two decimal places.</p> <p>27. -solve simple measure and money problems involving fractions and decimals to two decimal places.</p>	<p>28. -convert between different units of measure (e.g. kilometre to metre; hour to minute.)</p> <p>29. -measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.</p> <p>30. -find the area of rectilinear shapes by counting squares.</p> <p>31. -estimate, compare and calculate different measures, including money in pounds and pence.</p> <p>32. -read, write and convert time between analogue and digital 12 and 24-hour clocks.</p> <p>33. -solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</p>	<p>34. - compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.</p> <p>35. - identify acute and obtuse angles and compare and order angles up to two right angles by size.</p> <p>36. - identify lines of symmetry in 2-D shapes presented in different orientations.</p> <p>37. - complete a simple symmetric figure with respect to a specific line of symmetry.</p>	<p>38. -describe positions on a 2-D grid as coordinates in the first quadrant.</p> <p>39. -describe movements between positions as translations of a given unit to the left/right and up/down.</p> <p>40. -plot specified points and draw sides to complete a given polygon.</p>	<p>41. -interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</p> <p>42. -solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and simple line graphs.</p>