



WSS ADMISSION EXAMS MATHS PORTION

Updated: 2024-2025

Year

PORTIONS

Year 3

Number – number and place value

- Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.
- Recognise the place value of each digit in a two-digit number (tens, ones).
- Compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs.
- Read and write numbers to at least 100 in numerals and in words.

Number – addition and subtraction

- Solve problems with addition and subtraction.
- Recall and use addition and subtraction facts to 20 fluently.
- Add and subtract numbers using concrete objects, pictorial representations, and mentally.
- Recognise and use the inverse relationship between addition and subtraction.

Number – multiplication and division

- Recall and use multiplication and division facts for 2, 5 and 10.
- Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

Number – fractions

- Recognise, find, name and write fractions.

Number – measurement

- Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}$ C); capacity (litres/ml).
- Compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$
- Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.
- Solve simple problems involving addition and subtraction of money of the same unit, including giving change.
- Compare and sequence intervals of time.
- Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.
- Know the number of minutes in an hour and the number of hours in a day.

Geometry – position and direction

- Order and arrange combinations of mathematical objects in patterns and sequences.

Statistics

	<ul style="list-style-type: none"> • Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.
<p>Year 4</p>	<p><u>Number – number and place value</u></p> <ul style="list-style-type: none"> • Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a give number. • Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). • Compare and order numbers up to 1000. • Read and write numbers up to 1000 in numerals and in words. <p><u>Number – addition and subtraction</u></p> <ul style="list-style-type: none"> • Add and subtract numbers: <ul style="list-style-type: none"> ✓ three-digit number and ones ✓ three-digit number and tens. ✓ three-digit number and hundreds • Add and subtract numbers with up to three digits. • Estimate the answer to a calculation and use inverse operations. • Solve problems, including missing number facts, place value, and more complex addition and subtraction. <p><u>Number – multiplication and division</u></p> <ul style="list-style-type: none"> • Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. • Solve problems, including missing number problems, involving multiplication and division. <p><u>Number – fractions</u></p> <ul style="list-style-type: none"> • Count up and down in tenths, recognise that tenths arise from dividing an object into 10 equal parts. • Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. • Recognise and show, using diagrams, equivalent fractions with small denominators. • Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]. • Compare and order unit fractions, and fractions with the same denominators. <p><u>Number – measurement</u></p> <ul style="list-style-type: none"> • Measure, compare, add and subtract lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). • Measure the perimeter of simple 2-D shapes. • Add and subtract amounts of money to give change, using both £ and p in practical contexts. • Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.

	<ul style="list-style-type: none"> • Estimate and read time with increasing accuracy to the nearest minute. • Know the number of seconds in a minute and the number of days in each month, year and leap year. • Compare durations of events [for example to calculate the time taken by particular events or tasks]. <p><u>Geometry – position and direction</u></p> <ul style="list-style-type: none"> • Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them. • Recognise angles as a property of shape or a description of a turn. • Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn. • Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. <p><u>Statistics</u></p> <ul style="list-style-type: none"> • Interpret and present data using bar charts, pictograms and tables. • Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?']
<p>Year 5</p>	<p><u>Number – number and place value</u></p> <ul style="list-style-type: none"> • Count in multiples of 6, 7, 9, 25 and 1000. • Find 1000 more or less than a given number. • Count backwards through zero to include negative numbers. • Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). • Order and compare numbers beyond 1000. • Identify, represent and estimate numbers using different representations. • Round any number to the nearest 10, 100 or 1000. • Solve number and practical problems that involve all the above and with increasingly large positive numbers. • Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value. <p><u>Number – addition and subtraction</u></p> <ul style="list-style-type: none"> • 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. <p><u>Number – multiplication and division</u></p> <ul style="list-style-type: none"> • Recall multiplication and division facts for multiplication tables up to 12×12. • 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. • Recognise and use factor pairs and commutativity in mental calculations. • Multiply two-digit and three-digit numbers by a one-digit number using formal written

layout.

- Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit.

Number – fractions

- Recognise and show, using diagrams of common equivalent fractions.
- Count up and down in hundredths and recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
- Add and subtract fractions with the same denominator.
- Recognise and write decimal equivalents of any number of tenths or hundredths.
- Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$.
- Round decimals with one decimal place to the nearest whole number.
- Compare numbers with the same number of decimal places up to two decimal places.
- Solve simple measure and money problems involving fractions and decimals to two decimal places.

Number – measurement

- Convert between different units of measure (for example, kilometre to metre; hour to minute).
- Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
- Find the area of rectilinear shapes by counting squares.
- Estimate, compare and calculate different measures, including money in pounds and pence.
- Read, write and convert time between analogue and digital 12- and 24-hour clocks.
- Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

Geometry – position and direction

- Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
- Identify acute and obtuse angles and compare and order angles up to two right angles by size.
- Identify lines of symmetry in 2-D shapes presented in different orientations.
- Complete a simple symmetric figure with respect to a specific line of symmetry.
- Describe positions on a 2-D grid as coordinates in the first quadrant.
- Describe movements between positions as translations of a given unit to the left/right and up/down.
- Plot specified points and draw sides to complete a given polygon.

	<p><u>Statistics</u></p> <ul style="list-style-type: none"> • Interpret and present data using appropriate graphical methods, including bar charts and time graphs. • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
<p>Year 6</p>	<p><u>Number – number and place value</u></p> <ul style="list-style-type: none"> • Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit. • Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000. • Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. • Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000. • Solve number problems and practical problems that involve all of the above. • Read Roman numerals to 1000 (M) and recognise years written in Roman numerals. <p><u>Number – addition and subtraction</u></p> <ul style="list-style-type: none"> • Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction). • Add and subtract numbers mentally with increasingly large numbers. • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. <p><u>Number – multiplication and division</u></p> <ul style="list-style-type: none"> • Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. • Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers. • Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context. • Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. • Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3). • Solve problems involving multiplication and division including using my knowledge of factors and multiples, squares and cubes. • Solve problems involving addition, subtraction, multiplication and division and

a combination of these.

Number – fractions

- Compare and order fractions whose denominators are all multiples of the same number.
- Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example,
 - $2 + \frac{1}{2} = 2\frac{1}{2}$].
- Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
- Round decimals with two decimal places to the nearest whole number and to one decimal place.

Number –measurement

- Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).
- Use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.
- Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.
- Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes.

Geometry – position and direction

- Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.
- I can draw given angles, and measure them in degrees (°).
- Identify-
 - ✓ angles at a point and one whole turn (total 360°)
 - ✓ angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) other multiples of 90°
- Use the properties of rectangles to deduce related facts and find missing lengths and angles.
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
- Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.

Statistics

- Solve comparison, sum and difference problems using information presented in

a line graph.

- Complete, read and interpret information in tables, including timetables.