



Mathematics Curriculum Overview: Syria

Grade	Number	Algebra	Data	Spatial Sense, Geometry & Measurement	Financial Literacy	Social-Emotional Learning & Mathematical Processes
Grade 6	<p>Natural Numbers</p> <ul style="list-style-type: none"> - Adding, subtracting, dividing and multiplying natural numbers - Properties of multiplication - Rounding - Comparing and contrasting natural numbers <p>Operations</p> <ul style="list-style-type: none"> - Order of Operations - Exponents: <i>square numbers and cube numbers</i> - Fractions: <i>adding, subtracting, multiplying, and dividing mixed numbers</i> - Decimals: <i>adding, subtracting, and multiplying decimals</i> - Multiplying decimals with whole numbers and using fractions - Fractions, Decimals, and Percents - Factorization - Divisibility Rules - Largest Common Multiples (LCM) and Greatest Common Factors (GCF) <p>Ratio and Proportionality</p>	<p>Algebraic Expressions Equations</p>	<p>Mean</p>	<p>Symmetry</p> <ul style="list-style-type: none"> - Axial symmetry <p>Transformation</p> <ul style="list-style-type: none"> - Translation - Rotation <p>Lines</p> <ul style="list-style-type: none"> - Perpendicular and parallel lines - Line segmentation <p>Angles</p> <ul style="list-style-type: none"> - Properties of two related angles (alternate angles, adjacent angles) - Measuring angles <p>Geometric Shapes</p> <ul style="list-style-type: none"> - Parallelograms: <i>rectangles, diamonds, squares</i> - Trapezoid - Triangles: <i>types</i> - 3D shapes: Prisms and Cylinders <p>Measurement</p> <ul style="list-style-type: none"> - Units of measurement of length, area, and volume - Area and perimeter of parallelograms - Circles: <i>circumference and area, pi</i> - time <p>Similarity</p>	n/a	n/a
Grade 7	<p>Real Numbers</p> <ul style="list-style-type: none"> - Natural Numbers - Writing Numbers: digits and words - Place Value Table - Integers: <i>addition, subtraction, multiplication, and division</i> - Rational Numbers: <i>operations</i> - Cartesian Plane - Order of Operations - Exponents - Square Roots <p>Ratio and Proportionality</p> <ul style="list-style-type: none"> - Rate - Percentage - Fraction: cross multiplication 	<p>Algebraic Expressions and Equations</p>	<p>Statistics</p> <ul style="list-style-type: none"> - Graphs: <i>bar graphs, double bar graphs, binary column chart, histograms, pie/circle graphs, line graphs, scattered plots</i> <p>Probability</p> <ul style="list-style-type: none"> - events and their possibilities - two complementary events 	<p>Drawing Scale</p> <p>Transformation</p> <ul style="list-style-type: none"> - Reflection: <i>reflection centres</i> <p>Lines</p> <ul style="list-style-type: none"> - parallel lines and perpendicular lines <p>Measurement</p> <ul style="list-style-type: none"> - Units - Area <p>Geometric Shapes</p> <ul style="list-style-type: none"> - Parallelogram: <i>proving, lines of symmetry, properties, area, types</i> - Triangles: <i>classification, angles, drawing, area</i> - Circles: <i>drawing a circle that passes by a triangle vertex, area</i> - Prisms and cylinders: <i>surface area</i> 	n/a	n/a

Grade 8	<p>Real Numbers</p> <ul style="list-style-type: none"> - Rational and Irrational Numbers - Operations on large numbers - Word Problems: addition, subtraction, and multiplication <p>Order of Operations</p> <ul style="list-style-type: none"> - Exponents: rules on number 10 - Decimals - Calculations with Square Roots: <i>four operations, decimals</i> <p>Percentage</p> <p>Velocity</p>	<p>Expressions</p> <ul style="list-style-type: none"> - factoring and simplifying <p>Equations and Operations</p> <ul style="list-style-type: none"> - solving equations - linear equations - equality - equation synthesis 	<p>Statistics</p> <ul style="list-style-type: none"> - Mean - Tables - Aggregated Frequency - Representing Statistical Data 	<p>Proportionality and Graphical Representation</p> <ul style="list-style-type: none"> - Three Equal Ratios <p>Lines</p> <p>: <i>parallels, bisectors, and perpendicular lines</i></p> <p>Geometric Shapes</p> <ul style="list-style-type: none"> - Parallelogram - Triangles and Rectangles - Triangles: <i>height; bisectors, congruent triangles</i> - Circles: <i>a circle that passes a triangle vertex and the vertices of a right angle, tangent</i> - Pyramids and Cones: volume <p>Pythagorean Theorem</p>	n/a	n/a
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1. Adopted from: *The Ontario Science and Technology Curriculum, (2022)*, <https://www.dcp.edu.gov.on.ca/en/curriculum/science-technology> & Math Curricula of the Syrian Ministry of National Education.