



EVOLVE THROUGH KNOWLEDGE

Cd. Juárez, México

MMXXIV

JUNIOR HIGH

GRADE 7 MATHEMATICS

Cambridge Lower Secondary Mathematics

Learner's Book 7 - Second Edition

2026-2027 FULL-YEAR SYLLABUS | AUGUST 31, 2026 - JUNE 18, 2027

Course	Grade 7 Mathematics
School	The Darwin Institute
Level	Cambridge Lower Secondary / Stage 7
Instructional Note	Testing periods remain regular class days; instruction continues.

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COURSE OVERVIEW

This course develops mathematical understanding, fluency, reasoning, and problem-solving through the Cambridge Lower Secondary Mathematics framework. Students study Number, Algebra, Geometry & Measure, and Statistics & Probability through direct instruction, guided practice, collaborative investigation, real-world applications, and cumulative review.

COURSE OBJECTIVES

- Perform and explain calculations with integers, decimals, fractions, percentages, powers, and roots.
- Construct and manipulate algebraic expressions; solve introductory equations and inequalities.
- Identify patterns, sequences, functions, coordinates, and linear relationships.
- Analyze two- and three-dimensional shapes, transformations, angles, area, scale, and unit conversions.
- Collect, organize, represent, and interpret data; calculate mode, mean, median, and range.
- Understand and apply theoretical and experimental probability.
- Use mathematical reasoning to communicate strategies, justify solutions, and solve multi-step problems.

INSTRUCTIONAL APPROACH

Concept Development	Explicit modeling, vocabulary, worked examples, and visual representations.
Practice & Fluency	Structured practice that progresses from guided to independent work.
Reasoning & Communication	Students explain methods, compare strategies, and justify conclusions.
Application	Real-world and cross-curricular problems connect mathematics to authentic contexts.
Review & Intervention	Frequent retrieval practice, targeted reteaching, extension, and cumulative review.

GENERAL ASSESSMENT PRACTICES

All subjects at The Darwin Institute use the same school-wide grading weights shown below. Teachers may use subject-specific assignments and performance criteria, but the category percentages remain consistent across courses. Testing periods remain regular instructional days unless the school calendar specifically identifies a no-class day.

CALENDAR NOTES

- No classes: Oct 5-9, Oct 30, Nov 2, Nov 16, Nov 23-27, Dec 18-Jan 6, Jan 25, Feb 1, Mar 15-Apr 2, May 5, May 28.
- Testing periods are instructional days and do not interrupt the pacing sequence.
- June 18, 2027 is treated as the final academic class day for this syllabus.

WEEK-BY-WEEK CURRICULUM MAP - SEMESTER 1

Week	Dates	Topic / Unit	Main Topics	Assessment / Notes
1	Aug 31-Sep 4	Unit 1	Addition, subtraction, multiplication & division; integer operations and estimation	Classwork / practice
2	Sep 7-11	Units 2-3	Properties of 2D shapes; data collection & sampling	Practice / exit ticket
3	Sep 14-18	Units 3-4	Sampling continued; area of a triangle	Skills practice
4	Sep 21-25	Units 5-6	Order of operations; introduction to algebra and unknowns	Quiz
5	Sep 28-Oct 2	Unit 7	Organising and presenting data	Practice / worksheet
	Oct 5-9	NO CLASSES	Intersession	
6	Oct 12-16	Unit 7	Tables, charts, graphs and interpreting data	Mini-quiz
7	Oct 19-23	Unit 8	Properties of three-dimensional shapes	Classwork
8	Oct 26-29	Units 9-10	Multiples & factors; introduction to probability	Quiz
	Oct 30	NO CLASSES	Teacher Conferences	
	Nov 2	NO CLASSES	Holiday	
9	Nov 3-6	Section 1 Review	Units 1-10 review and assessment preparation	Section 1 assessment; testing period continues
10	Nov 9-13	Units 11-12	Rounding & estimation with decimals; mode, mean, median & range	Practice / skills
	Nov 16	NO CLASSES	Mexican Revolution Day observance	
11	Nov 17-20	Unit 13	Transformations of 2D shapes	Classwork
	Nov 23-27	NO CLASSES	Intersession	
12	Nov 30-Dec 4	Unit 14	Manipulating algebraic expressions	Quiz
13	Dec 7-11	Unit 15	Fractions, decimals & percentages	Practice
14	Dec 14-17	Units 15-16	FDP relationships; probability and outcomes	Skills practice
	Dec 18-Jan 6	NO CLASSES	Winter Break	

WEEK-BY-WEEK CURRICULUM MAP - SEMESTER 2

Week	Dates	Topic / Unit	Main Topics	Assessment / Notes
15	Jan 7-8	Unit 17	Angle properties; re-entry and review	Classwork
16	Jan 11-15	Unit 17	Angles, lines and geometrical reasoning	Quiz
17	Jan 18-22	Units 18-19	Algebraic expressions & formulae; probability experiments	Practice
	Jan 25	NO CLASSES	Teacher Conferences	
18	Jan 26-29	Unit 20	Introduction to equations & inequalities	Quiz
	Feb 1	NO CLASSES	Mexican Constitution Day observance	
19	Feb 2-5	Section 2 Review	Consolidation of Units 11-20	Section review
20	Feb 8-12	Unit 21	Sequences	Practice
21	Feb 15-19	Unit 22	Percentages of whole numbers	Quiz
22	Feb 22-26	Unit 23	Visualising three-dimensional shapes	Classwork
23	Mar 1-5	Unit 24	Introduction to functions	Testing period; instruction continues
24	Mar 8-12	Units 25-26	Coordinates & 2D shapes; squares, square roots, cubes & cube roots	Quiz / skills practice
	Mar 15-Apr 2	NO CLASSES	Interession / Spring Break	
25	Apr 5-9	Unit 27	Linear functions	Practice
26	Apr 12-16	Unit 28	Converting units & scale drawings	Quiz
27	Apr 19-23	Unit 29	Ratio	Classwork
28	Apr 26-30	Unit 29	Ratio applications and problem solving	Problem-solving task
	May 5	NO CLASSES	Battle of Puebla observance	
29	May 3-4 & 6-7	Unit 30	Graphs & rates of change - introduction	Practice
30	May 10-14	Unit 30	Graphs, rates of change and real-world interpretation	Quiz / application
31	May 17-21	Section 3 Review	Review Units 21-30; cumulative problem solving	Section 3 assessment
32	May 24-27	Cambridge Skills Review	Integrated Number, Algebra, Geometry, Statistics & Probability	Cumulative practice
	May 28	NO CLASSES	Teacher Conferences	
33	May 31-Jun 4	Cumulative Review	Mathematical reasoning and	Targeted review

Week	Dates	Topic / Unit	Main Topics	Assessment / Notes
			multi-step applications	
34	Jun 7-11	Year-End Review	Remediation, enrichment, Cambridge-style problems	Practice / conferencing
35	Jun 14-18	Testing Period / Final Week	Final assessment, corrections, reflection and course closure	Final evaluation; instruction continues through Jun 18

GENERAL SCHOOL-WIDE ACADEMIC RUBRIC

This rubric is designed for use across subjects. Teachers may identify which criteria apply to a particular assignment and may add task-specific descriptors when needed. The four performance levels should remain consistent so students receive common expectations across courses.

SCHOOL-WIDE GRADING WEIGHTS

Institutional grading policy - applicable to all subjects

Assessment Category	Weight
Tests	30%
Classwork	30%
Homework	15%
Projects	10%
Participation	10%
Presentation, Order & Attendance	5%
TOTAL	100%

These percentages are standard across all subjects. Task-specific rubrics may be added without changing the category weights.

Criterion	4 - Exceeds Expectations	3 - Meets Expectations	2 - Approaching Expectations	1 - Beginning
Knowledge & Understanding	Demonstrates accurate, thorough understanding; uses subject vocabulary and concepts precisely.	Demonstrates solid understanding with minor gaps or errors.	Demonstrates partial understanding; important gaps or misconceptions remain.	Demonstrates limited understanding; major concepts are missing or inaccurate.
Application & Skills	Applies skills accurately and independently in familiar and unfamiliar contexts.	Applies skills correctly in most situations with limited support.	Applies some skills correctly but needs support or makes repeated errors.	Has difficulty applying required skills even with support.
Reasoning / Critical Thinking	Analyzes evidence, makes strong connections, justifies ideas, and solves problems strategically.	Explains thinking and makes reasonable connections; justification is generally clear.	Reasoning is partly developed; explanations or connections are incomplete.	Reasoning is minimal, unclear, or unsupported.
Communication	Communicates ideas clearly, logically, and appropriately for the subject and audience.	Communication is clear and organized with minor lapses.	Communication is understandable but inconsistent, incomplete, or loosely organized.	Communication is difficult to follow, incomplete, or inappropriate for the task.

Criterion	4 - Exceeds Expectations	3 - Meets Expectations	2 - Approaching Expectations	1 - Beginning
Accuracy & Quality	Work is highly accurate, complete, polished, and demonstrates careful attention to detail.	Work is mostly accurate and complete with a few minor errors.	Work contains several errors or missing elements that affect quality.	Work is incomplete or contains frequent errors that significantly affect quality.
Independence & Responsibility	Uses time effectively, follows directions, meets deadlines, and demonstrates strong ownership of learning.	Usually follows directions, manages time, and completes work responsibly.	Needs reminders or support to manage time, follow directions, or complete work.	Frequently does not follow directions, use time effectively, or complete required work.

SUGGESTED CONVERSION TO SCORE

When a numeric score is required, teachers may average the applicable criterion levels and convert them consistently. Suggested bands: Level 4 = 90-100%, Level 3 = 80-89%, Level 2 = 70-79%, Level 1 = below 70%. Schools or departments may adjust numeric bands to match official grading policy.

RUBRIC USE GUIDELINES

- Select only the criteria that are relevant to the task; not every assignment must use all six criteria.
- Share the rubric before major assignments so students understand expectations.
- Provide concise evidence-based feedback connected to the rubric descriptors.
- For group work, assess both the shared product and, when appropriate, individual contribution.
- For tests and quizzes with objective right/wrong answers, use the regular point score; the rubric is most useful for open-ended work, projects, presentations, writing, labs, problem solving, and performance tasks.

Teacher: _____

School Year: 2026-2027

Course: Grade 7 Mathematics

Approved / Reviewed: _____