

Mathematics

Program Plan 2026/27

I. TARGETS OF THE YEAR

	Targets	Related Learning Goals of Secondary Education
1	Enhance students' effectiveness in learning mathematics	Breadth of Knowledge, Language Proficiency, Generic Skills, Digital Literacy
2	Enhance students' motivation in learning mathematics	National identity and Global Perspective, Breadth of Knowledge, Generic Skills
3	Construct a tiered Gifted Education framework and unleash students' potential	Breadth of Knowledge, Generic Skills, Digital Literacy

II. IMPLEMENTATION PLAN

A. Strategies Related to the Targets of the Year

TARGET 1: Enhance students' effectiveness in learning mathematics

	Strategies	Success Criteria	Methods of Evaluation	Time Scale	People in Charge	Resources Required
1.1	Use school-based assignments aligned with public exam formats.	Target passing rate: S1: 90–95% S2: 70–80% S3: 70–80% S4: 75–85% S5: 75–85% S6: 75–85%	DSE results; UT & Exam results; KPM results; Stakeholder survey results; APASO-III results	Whole year	WKW*, WLW	Math Dept. budget
1.2	Conduct 3-minute quizzes in each lesson using school-based assignments to monitor students' learning progress.			Whole year	WKW*, CHM	
1.3	Modify school-based assignments for chapter tests, uniform tests, and exams and provide clear revision materials.			Whole year	WKW*, WLW	
1.4	Refine S3 UT & exam paper design using an assessment blueprint to standardize difficulty levels.			Whole year	WKW*, CKW, WLW	

1.5	Implement retest system for assessments to encourage targeted revision.	Target rate for scoring 70% or higher in elite classes: 1/2/3C: 60–70% 1/2/3E: 80–90% DSE exam target: Level 4+: 30–35% Level 3+: 60–65% Level 2+: 85–90%		Whole year	WKW*, WLW	
1.6	Integrate Mathematical Modelling into S2 formal curriculum.			Whole year	WLW*, LTH	
1.7	Identify key skills across the curriculum and integrate them into 3-minute quizzes for reinforcement.			Whole year	WKW*, CHM	
1.8	Junior form coordinators guide teachers' teaching with DSE perspective to improve teaching effectiveness.			Whole year	HYS(S1), WLW(S2), CKW(S3)	
1.9	Conduct one-on-two homework tutoring for S1/S2/S3 to clarify math concepts.			Whole year	LTH*, SWS	Math Dept. budget
1.10	Conduct S1 summer bridging classes to support their transition from primary to secondary.			Aug 2026	HYS*, CHM, LCS, LTC, SWS	
1.11	Promote Language-across-the-Curriculum with English Dept. to enhance students' English proficiency for math learning.			Whole year	LTH*, HYS	
1.12	Conduct S1 pre-UT & pre-exam study groups for marginal students.			Whole year	CHM*, HYS, LTH, SWS	
1.13	Conduct mock exams for S6 to identify strengths and weaknesses early.			Dec 2026	NSY*, CKW, LCS, WKW	
1.14	Evaluate AI tools for enhancing teaching and learning effectiveness. The focus includes automating grading (e.g., AI Marker), generating mock exam papers, and integrating AI feedback into the school-based curriculum, etc.			Whole year	CKW*	

TARGET 2: Enhance students' motivation in learning mathematics

	Strategies	Success Criteria	Methods of Evaluation	Time Scale	People in Charge	Resources Required
2.1	Inform students about test content alignment to increase their motivation and confidence.	Students' motivation in learning mathematics is enhanced.	KPM results; Stakeholder survey results; APASO-III results	Whole year	WKW*	
2.2	Host Math Carnival (S1 – S5) to promote school-wide math atmosphere.			March, 2027	LCS*, CKW, LTH, NSY, WLW, WHT	Math Dept. budget
2.3	Organize “Math & Science Trail” (S1) on Academic Activity Day to enhance students' interest in math.			March, 2027	HYS*, CHM, LTC, SWS, WKW, WHT, Science Panel	Math Dept. budget
2.4	Launch S3 math reading program and join EDB book report competition to improve math literacy.			Oct 2026 – Mar 2027	CKW*, NSY	
2.5	Host “The 2nd Primary Mathematics Invitational Competition” to promote math culture.			Nov 2026	WKW*, CHM, WLW, All Math Panel Members	Math Dept. budget
2.6	Organize pre-competition workshops for the Primary Mathematics Invitational Competition. Provide 1-2 training sessions to promote math culture.			Nov 2026	CHM*, WLW	
2.7	Organize an alumni experience-sharing session for S.6 students. Invite graduates as guest speakers to share effective math revision strategies and tips.			Nov 2026	NSY*, CKW, LCS, WKW	
2.8	Encourage and train students to participate in mathematical competitions (e.g. Olympiad, Modelling, etc.) to broaden their exposure.			Whole year	HYS*, WLW	Math Dept. budget

TARGET 3: Construct a tiered Gifted Education framework and unleash students' potential

	Strategies	Success Criteria	Methods of Evaluation	Time Scale	People in Charge	Resources Required
3.1	Develop differentiated teaching materials and differentiated assignments for S3 gifted students (tier 1).	DSE exam target: Level 5+: 15–20% Level 4+: 30–35%	DSE results; UT & Exam results; KPM results; Stakeholder survey results; APASO-III results	Whole year	NSY*, CKW, HYS	
3.2	Establish “Math School Team” for top students (S1–S5) to develop students’ high-order thinking and problem-solving skills and to support gifted education (tier 2).			Whole year	HYS*, WLW, LCS	Math Dept. budget
3.3	Launch “F6 Math Star Class” for top S6 students to prepare for Level 5/5*/5** in DSE and to support gifted education (tier 2).			Oct 2026 – Jan 2027	HYS*, WLW	Math Dept. budget
3.4	Encourage S4/S5 students to join CUHK summer gifted program to broaden math exposure and to support gifted education (tier 3).			Jul – Aug 2027	WLW*, CHM	Math Dept. budget
3.5	Encourage S1/S2/S3 students to join HKU Multidimensional Mathematical Mind (M ³) Program to broaden math exposure and to support gifted education (tier 3).			Jan – May 2027	WLW*, HYS	Math Dept. budget
3.6	Encourage S1/S2/S3/S4/S5 students to join PolyU summer gifted program to broaden math exposure and to support gifted education (tier 3).			Jul – Aug 2027	WLW*, HYS	
3.7	Encourage and train students to participate in mathematical competitions (e.g. Olympiad, Modelling, etc.) to broaden their exposure.			Whole year	HYS*, WLW	Math Dept. budget

B. Regular Programs

	Strategies	Success Criteria	Methods of Evaluation	Time Scale	People in Charge	Resources Required
1	Optimize department handbook.	Resources are well organized.	Teacher opinion.	Whole year	WKW*, WLW	
2	Organize Google Drive.			Whole year	WKW*	
3	Regular backups of Google Drive.			Whole year	WKW*	
4	Update department webpage.			Sept – Oct 2025	LTH*	
5	Optimize score recording system.			Whole year	LTH*, CHM	
6	Provide CUHK internship opportunities.	Train future educators.		Whole year	WKW*, CHM, NSY	

III. BUDGET

	Items	Expenditure	Remarks
1	Activities (Junior 1-on-2 Homework Tutoring) Hourly rate $\$250 \times 9 \text{ hours} \times 2 \text{ terms} \times 50\% \text{ subsidy} \times 6 \text{ groups per grade} \times 3 \text{ grades}$	40500	
2	Activities (Math School Team Training) Hourly rate $\$400 \times 1.25 \text{ hours} \times 10 \text{ sessions} \times 2 \text{ terms} \times 50\% \text{ subsidy} \times 5 \text{ grades}$	25000	
3	Activities (Math School Team Competition Fees) Fee $\$250 \times 2 \text{ times} \times 50\% \text{ subsidy} \times 10 \text{ students per grade} \times 5 \text{ grades}$ Bus Fees $\$1500 \times 4 \text{ trips}$	18500	
4	Activities (S6 Math Star Class) Hourly rate $\$400 \times 1.5 \text{ hours} \times 10 \text{ sessions}$	6000	
5	Activities (CUHK EPYMT Summer Program Subsidy) Tuition $\$4000 \times 50\% \text{ subsidy} \times 2 \text{ students}$	4000	
6	Activities (HKU M ³ Program Subsidy) Tuition $\$4000 \times 50\% \text{ subsidy} \times 2 \text{ students}$	4000	

7	Activities (The 2nd Primary Mathematics Invitational Competition)	9000	
8	Activities (Math Carnival)	2000	
9	Activities (Math & Science Trail)	3000	
10	Teacher Reference Books	2000	
11	Library Student Reference Books	2000	
12	Publisher Teacher Editions and Teaching Materials	1000	
13	School-based Assignment Book	3000	
14	Summer Bridging Class Notes and Summer Assignment Printing	3000	
15	Math Teaching Tools	1000	
16	Stationery	600	
	Total	\$124,600	

IV. PROGRAM TEAM

Wong Ka Wing (Panel Head)
 Chiu Ho Man (Deputy Panel Head)
 Wong Lai Wa (Deputy Panel Head)
 Cheung Kwok Wai
 Ho Yee Shan
 Lee Cheuk Sum
 Lee Tsz Hin
 Li Tak Chung
 Ng Suk Yin
 Sze Kelvin
 Wong Hei Ting (Teaching Assistant)