

PSLE Checkpoint Primary 5 Mathematics Knowledge Point List

V4 MOE-refined 40-week plan | Corrected level boundaries, complete coverage and independently assessable knowledge points

Plan at a Glance

Annual Weeks	40
Atomic Knowledge Points	167
Pure MOE Core Weeks	26
Spiral / Transfer Weeks	7
KP Range per Week	4-5



Curriculum Design Rules

1	MOE foundation	All required P5 content is retained as the non-negotiable core.
2	Concrete-pictorial-abstract progression	New ideas begin with objects and pictures before symbolic fluency and transfer.
3	Spiral retrieval	Important number facts, operations, measurement, geometry and data ideas are revisited across terms.
4	Atomic assessment	Every KP describes one observable outcome that can be assessed independently.
5	Advanced but age-appropriate	Extension is limited to reasoning, representation, strategy choice and unfamiliar application rather than premature upper-primary content.

Workbook Structure

Weekly KP Plan	40-week sequence with 4-5 KPs, spiral retrieval and assessment emphasis.
Atomic KP Register	One row per assessable KP with stable identifiers and evidence requirements.
Spiral Map	Shows when each important family is introduced, developed and consolidated.
MOE Coverage Audit	Cross-checks the complete P5 syllabus scope against the weekly allocation.
Sources & Notes	Records source scope, codes and curriculum interpretation rules.

Primary 5 Mathematics - Complete Weekly Knowledge Point Plan

Each week contains 4-5 assessable KPs. Review weeks retrieve taught content and require reasoning, checking and transfer.

Term	Term Week	Annual Week	KP Count	Domain	Primary Family	Learning Stage	Core Status	Weekly Focus	Assessable Knowledge Points	Spiral Retrieval	Assessment Emphasis	Progression Note
1	1	1	4	Number & Algebra	NA-WN	Develop	MOE Core	Numbers to 10 million	1. Read and write numbers to 10 million 2. Interpret place value to millions 3. Compare and order large numbers 4. Solve digit-constraint problems	Retrieve high-value P4 prerequisites	Concept recognition, procedural accuracy, application and explanation	Develop numbers to 10 million through accurate representations, explanation, strategy choice and one unfamiliar application.
1	2	2	4	Number & Algebra	NA-MD	Develop	MOE Core	Multiplying and dividing by powers of ten	1. Multiply whole numbers by 10 100 and 1000 2. Divide whole numbers by 10 100 and 1000 3. Extend to their multiples 4. Explain place-value shifts without adding zeros mechanically	Retrieve: Numbers to 10 million; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop multiplying and dividing by powers of ten through accurate representations, explanation, strategy choice and one unfamiliar application.
1	3	3	5	Number & Algebra	NA-AS	Develop	MOE Core	Four operations and order of operations	1. Consolidate addition subtraction multiplication and division of whole numbers 2. Apply multiplication and division before addition and subtraction 3. Use brackets correctly 4. Evaluate multi-operation expressions 5. Estimate and verify results	Retrieve: Multiplying and dividing by powers of ten; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop four operations and order of operations through accurate representations, explanation, strategy choice and one unfamiliar application.
1	4	4	4	Number & Algebra	NA-FR	Develop	MOE Core	Fraction and division	1. Express whole-number division as a fraction 2. Express fractions as decimals 3. Interpret fraction as quotient 4. Locate quotient fractions on number lines	Retrieve: Four operations and order of operations; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop fraction and division through accurate representations, explanation, strategy choice and one unfamiliar application.
1	5	5	4	Number & Algebra	NA-FR	Develop	MOE Core	Adding and subtracting mixed numbers	1. Add mixed numbers 2. Subtract mixed numbers with renaming 3. Simplify answers 4. Estimate using benchmark fractions	Retrieve: Fraction and division; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop adding and subtracting mixed numbers through accurate representations, explanation, strategy choice and one unfamiliar application.
1	6	6	4	Number & Algebra	NA-FR	Develop	MOE Core	Multiplying fractions by whole numbers	1. Multiply proper and improper fractions by whole numbers 2. Multiply mixed numbers by whole numbers 3. Use cancellation efficiently 4. Solve fraction-of-quantity problems	Retrieve: Adding and subtracting mixed numbers; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop multiplying fractions by whole numbers through accurate representations, explanation, strategy choice and one unfamiliar application.
1	7	7	4	Number & Algebra	NA-FR	Develop	MOE Core	Multiplying fractions	1. Multiply proper fractions 2. Multiply proper by improper fractions 3. Multiply two improper fractions 4. Interpret multiplication of fractions with models	Retrieve: Multiplying fractions by whole numbers; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop multiplying fractions through accurate representations, explanation, strategy choice and one unfamiliar application.
1	8	8	4	Problem Solving & Mathematical Processes	NA-FR	Develop	MOE Core	Fraction word problems	1. Solve multi-step fraction problems 2. Find a fraction of a remainder 3. Use bar models for successive parts 4. Check answers against the whole	Retrieve: Multiplying fractions; cumulative fluency from earlier terms.	Structured problem solving, method choice, reasoning and checking	Develop fraction word problems through accurate representations, explanation, strategy choice and one unfamiliar application.
1	9	9	4	Measurement & Geometry	MG-MEAS	Develop	MOE Core	Area of triangle	1. Identify a base and corresponding perpendicular height 2. Derive and use triangle area formula 3. Find a missing base or height 4. Find composite areas with triangles	Retrieve: Fraction word problems; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop area of triangle through accurate representations, explanation, strategy choice and one unfamiliar application.
1	10	10	5	Problem Solving & Mathematical Processes	PS-REASON	Master / Transfer	Spiral Maintenance / Transfer	Term 1 mastery and transfer	1. Retrieve large numbers operations and fractions 2. Apply triangle area 3. Solve multi-step fraction problems 4. Use estimation and cancellation 5. Complete one advanced challenge	Retrieve: Area of triangle; cumulative fluency from earlier terms.	Structured problem solving, method choice, reasoning and checking	Develop term 1 mastery and transfer through accurate representations, explanation, strategy choice and one unfamiliar application.
2	1	11	5	Measurement & Geometry	MG-MEAS	Develop	MOE Core	Volume concepts, unit cubes and representations	1. Build solids with unit cubes 2. Measure volume in cubic units cubic centimetres and cubic metres 3. Draw cubes and cuboids on an isometric grid 4. Find the volume of a cube or cuboid 5. Relate millilitres and litres to cubic centimetres	Retrieve: Term 1 mastery and transfer; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop volume of cube and cuboid through accurate representations, explanation, strategy choice and one unfamiliar application.

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2	2	12	4	Measurement & Geometry	MG-MEAS	Develop	MOE Core	Volume and rectangular-tank applications	1. Find the volume of a rectangular tank 2. Find the volume of liquid in a rectangular tank 3. Compare volumes using consistent cubic units 4. Solve volume problems involving millilitres litres and cubic centimetres	Retrieve: Volume of cube and cuboid; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop volume applications through accurate representations, explanation, strategy choice and one unfamiliar application.
2	3	13	5	Number & Algebra	NA-DEC	Develop	MOE Core	Decimal operations and powers of ten	1. Add and subtract decimals accurately 2. Multiply and divide decimals within syllabus limits 3. Multiply and divide decimals by 10 100 and 1000 4. Extend powers-of-ten reasoning to their multiples 5. Estimate and verify decimal results	Retrieve: Volume applications; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop decimal operations and powers of ten through accurate representations, explanation, strategy choice and one unfamiliar application.
2	4	14	4	Measurement & Geometry	MG-MEAS	Develop	MOE Core	Measurement conversions in decimal form	1. Convert km and m 2. Convert m and cm 3. Convert kg and g 4. Convert L and mL	Retrieve: Decimal operations and powers of ten; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop measurement conversions in decimal form through accurate representations, explanation, strategy choice and one unfamiliar application.
2	5	15	4	Number & Algebra	NA-PROP	Introduce	MOE Core	Rate concepts	1. Interpret rate as amount per unit 2. Find rate 3. Find total amount 4. Find number of units	Retrieve: Measurement conversions in decimal form; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop rate concepts through accurate representations, explanation, strategy choice and one unfamiliar application.
2	6	16	4	Problem Solving & Mathematical Processes	NA-PROP	Develop	MOE Core	Rate word problems	1. Solve rate problems with proportional reasoning 2. Use tables and unitary method 3. Compare two rates 4. Track compound units accurately	Retrieve: Rate concepts; cumulative fluency from earlier terms.	Structured problem solving, method choice, reasoning and checking	Develop rate word problems through accurate representations, explanation, strategy choice and one unfamiliar application.
2	7	17	4	Number & Algebra	NA-PCT	Introduce	MOE Core	Percentage meaning	1. Express part of a whole as a percentage 2. Use % correctly 3. Connect fractions decimals and percentages 4. Estimate common percentages	Retrieve: Rate word problems; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop percentage meaning through accurate representations, explanation, strategy choice and one unfamiliar application.
2	8	18	4	Number & Algebra	NA-PCT	Develop	MOE Core	Percentage of a quantity	1. Find a percentage part of a whole 2. Use 1% 10% and benchmark strategies 3. Solve percentage word problems 4. Check percentage answers against the whole	Retrieve: Percentage meaning; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop percentage of a quantity through accurate representations, explanation, strategy choice and one unfamiliar application.
2	9	19	4	Problem Solving & Mathematical Processes	NA-PCT	Develop	MOE Core	Financial percentage	1. Find discount 2. Find GST in syllabus contexts 3. Find simple annual interest 4. Compare final prices	Retrieve: Percentage of a quantity; cumulative fluency from earlier terms.	Structured problem solving, method choice, reasoning and checking	Develop financial percentage through accurate representations, explanation, strategy choice and one unfamiliar application.
2	10	20	5	Problem Solving & Mathematical Processes	PS-REASON	Master / Transfer	Spiral Maintenance / Transfer	Term 2 mastery and reasoning	1. Retrieve volume decimals rate and percentage 2. Solve unit-conversion problems 3. Compare rates and prices 4. Use fraction-decimal-percentage links 5. Explain solution efficiency	Retrieve: Financial percentage; cumulative fluency from earlier terms.	Structured problem solving, method choice, reasoning and checking	Develop term 2 mastery and reasoning through accurate representations, explanation, strategy choice and one unfamiliar application.
3	1	21	4	Measurement & Geometry	MG-GEO	Develop / Apply	MOE Core	Angles and angle facts	1. Use angles on a line and at a point 2. Use vertically opposite angles 3. Find unknown angles in multi-step diagrams 4. State reasons accurately	Retrieve: Term 2 mastery and reasoning; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop angles and angle facts through accurate representations, explanation, strategy choice and one unfamiliar application.
3	2	22	4	Measurement & Geometry	MG-GEO	Develop / Apply	MOE Core	Properties of triangles	1. Classify triangles by sides and angles 2. Use isosceles triangle properties 3. Use equilateral triangle properties 4. Use angle sum of a triangle	Retrieve: Angles and angle facts; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop properties of triangles through accurate representations, explanation, strategy choice and one unfamiliar application.
3	3	23	4	Measurement & Geometry	MG-GEO	Develop / Apply	MOE Core	Unknown angles in triangles	1. Find missing triangle angles 2. Combine line point and triangle facts 3. Use exterior-angle reasoning as an extension 4. Distinguish marked facts from visual assumptions	Retrieve: Properties of triangles; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop unknown angles in triangles through accurate representations, explanation, strategy choice and one unfamiliar application.

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3	4	24	4	Measurement & Geometry	MG-GEO	Develop / Apply	MOE Core	Properties of parallelograms rhombuses and trapeziums	1. Identify defining properties 2. Use parallel-side angle relationships in guided cases 3. Compare quadrilaterals 4. Find unknown angles using properties	Retrieve: Unknown angles in triangles; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop parallelogram rhombus and trapezium through accurate representations, explanation, strategy choice and one unfamiliar application.
3	5	25	4	Measurement & Geometry	PS-REASON	Develop / Apply	MOE Core	Composite geometric figures	1. Combine triangle and quadrilateral properties 2. Find unknown angles without extra construction 3. Find missing lengths from perimeter 4. Explain a chain of geometric reasoning	Retrieve: Parallelogram rhombus and trapezium; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop composite geometric figures through accurate representations, explanation, strategy choice and one unfamiliar application.
3	6	26	4	Statistics	ST-DATA	Consolidate	Spiral Maintenance / Transfer	Data representation retrieval	1. Interpret tables line graphs and pie charts 2. Compare multiple representations 3. Calculate totals and differences 4. Identify misleading or incomplete claims	Retrieve: Composite geometric figures; cumulative fluency from earlier terms.	Data reading, calculation, interpretation and evidence	Develop data representation retrieval through accurate representations, explanation, strategy choice and one unfamiliar application.
3	7	27	4	Statistics	ST-DATA	Extend	Advanced Bridge / Extension	Average introduction (advanced bridge)	1. Interpret average as equal sharing 2. Find a simple average 3. Find a total from average and number of items 4. Compare average with individual values	Retrieve: Data representation retrieval; cumulative fluency from earlier terms.	Data reading, calculation, interpretation and evidence	Develop average introduction (advanced bridge) through accurate representations, explanation, strategy choice and one unfamiliar application.
3	8	28	4	Number & Algebra	NA-ALG	Develop / Apply	Advanced Bridge / Extension	Algebraic thinking bridge	1. Use a symbol or letter for an unknown 2. Translate simple verbal relationships 3. Evaluate a simple expression by substitution 4. Solve simple missing-value equations	Retrieve: Average introduction (advanced bridge); cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop algebraic thinking bridge through accurate representations, explanation, strategy choice and one unfamiliar application.
3	9	29	4	Problem Solving & Mathematical Processes	PS-MODEL	Develop / Apply	MOE Core	Multi-step model method	1. Model fractions percentages and rates 2. Use before-after bars 3. Identify a common unit 4. Write equations from models	Retrieve: Algebraic thinking bridge; cumulative fluency from earlier terms.	Structured problem solving, method choice, reasoning and checking	Develop multi-step model method through accurate representations, explanation, strategy choice and one unfamiliar application.
3	10	30	5	Problem Solving & Mathematical Processes	PS-REASON	Master / Transfer	Spiral Maintenance / Transfer	Term 3 mastery and application	1. Integrate percentage rate geometry and data 2. Solve a three-step structured problem 3. Explain geometric reasons 4. Evaluate a simple expression 5. Review errors by KP	Retrieve: Multi-step model method; cumulative fluency from earlier terms.	Structured problem solving, method choice, reasoning and checking	Develop term 3 mastery and application through accurate representations, explanation, strategy choice and one unfamiliar application.
4	1	31	4	Number & Algebra	NA-FR	Extend	Advanced Bridge / Extension	Advanced fraction patterns	1. Use fraction products to compare quantities 2. Find missing factors in fraction equations 3. Reason about scaling by a fraction 4. Solve a fraction pattern problem	Retrieve: Term 3 mastery and application; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop advanced fraction patterns through accurate representations, explanation, strategy choice and one unfamiliar application.
4	2	32	4	Problem Solving & Mathematical Processes	NA-PCT	Extend	Advanced Bridge / Extension	Advanced percentage problems	1. Find original price in guided cases 2. Solve successive discount contexts as extension 3. Compare percentage and absolute change 4. Use before-after models	Retrieve: Advanced fraction patterns; cumulative fluency from earlier terms.	Structured problem solving, method choice, reasoning and checking	Develop advanced percentage problems through accurate representations, explanation, strategy choice and one unfamiliar application.
4	3	33	4	Problem Solving & Mathematical Processes	MG-MEAS	Extend	Advanced Bridge / Extension	Advanced rate and volume	1. Combine rate with volume 2. Solve filling and emptying situations without simultaneous rates 3. Convert units before applying rate 4. Judge whether a rate answer is realistic	Retrieve: Advanced percentage problems; cumulative fluency from earlier terms.	Structured problem solving, method choice, reasoning and checking	Develop advanced rate and volume through accurate representations, explanation, strategy choice and one unfamiliar application.
4	4	34	4	Measurement & Geometry	PS-REASON	Extend	Advanced Bridge / Extension	Advanced geometry	1. Solve multi-step unknown-angle problems 2. Use symmetry and quadrilateral properties 3. Find triangle areas in composite figures 4. Reason from partial diagrams	Retrieve: Advanced rate and volume; cumulative fluency from earlier terms.	Concept recognition, procedural accuracy, application and explanation	Develop advanced geometry through accurate representations, explanation, strategy choice and one unfamiliar application.
4	5	35	4	Statistics	ST-DATA	Consolidate	MOE Core + Advanced Bridge	Data investigation and average	1. Collect numerical data 2. Calculate and interpret average 3. Choose a suitable representation 4. State a conclusion and limitation	Retrieve: Advanced geometry; cumulative fluency from earlier terms.	Data reading, calculation, interpretation and evidence	Develop data investigation and average through accurate representations, explanation, strategy choice and one unfamiliar application.

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4	6	36	4	Problem Solving & Mathematical Processes	PS-HEUR	Consolidate	MOE Core	Heuristics for upper primary	1. Use working backward 2. Use before-after 3. Make an assumption in guided cases 4. Use a systematic table	Retrieve: Data investigation and average; cumulative fluency from earlier terms.	Structured problem solving, method choice, reasoning and checking	Develop heuristics for upper primary through accurate representations, explanation, strategy choice and one unfamiliar application.
4	7	37	4	Problem Solving & Mathematical Processes	PS-HEUR	Consolidate	MOE Core	Non-routine multi-topic problems	1. Connect fractions decimals percentages and rate 2. Combine geometry and measurement 3. Interpret a diagram not drawn to scale 4. Present a logically sequenced solution	Retrieve: Heuristics for upper primary; cumulative fluency from earlier terms.	Structured problem solving, method choice, reasoning and checking	Develop non-routine multi-topic problems through accurate representations, explanation, strategy choice and one unfamiliar application.
4	8	38	4	Problem Solving & Mathematical Processes	PS-REASON	Master / Transfer	Spiral Maintenance / Transfer	PSLE-format readiness I	1. Solve short-answer fluency items 2. Solve structured multi-step items 3. Manage units and rounding 4. Check answers strategically	Retrieve: Non-routine multi-topic problems; cumulative fluency from earlier terms.	Structured problem solving, method choice, reasoning and checking	Develop psle-format readiness i through accurate representations, explanation, strategy choice and one unfamiliar application.
4	9	39	4	Problem Solving & Mathematical Processes	PS-REASON	Master / Transfer	Spiral Maintenance / Transfer	P5 cumulative mastery	1. Retrieve all P5 content 2. Diagnose weak KPs 3. Redo errors with corrected reasoning 4. Solve a balanced advanced set	Retrieve: PSLE-format readiness I; cumulative fluency from earlier terms.	Structured problem solving, method choice, reasoning and checking	Develop p5 cumulative mastery through accurate representations, explanation, strategy choice and one unfamiliar application.
4	10	40	5	Problem Solving & Mathematical Processes	PS-REASON	Master / Transfer	Spiral Maintenance / Transfer	P5 year-end mastery and P6 readiness	1. Master fraction decimal percentage and rate relationships 2. Master volume triangle area and geometry properties 3. Use early algebra and average 4. Solve complex models and heuristics 5. Transfer to PSLE-style problems	Retrieve: P5 cumulative mastery; cumulative fluency from earlier terms.	Structured problem solving, method choice, reasoning and checking	Develop p5 year-end mastery and p6 readiness through accurate representations, explanation, strategy choice and one unfamiliar application.

Primary 5 Mathematics - Atomic Knowledge Point Register

Stable KP identifiers support assessment generation, error analysis and future curriculum maintenance.

KP ID	Week KP ID	Annual Week	Term	Weekly Focus	Spiral Family	Domain	Learning Stage	Core Status	Atomic Knowledge Point	Assessable Evidence
NA-WN-001	P5-W01-KP1	1	1	Numbers to 10 million	NA-WN	Number & Algebra	Develop	MOE Core	Read and write numbers to 10 million	Demonstrate “Read and write numbers to 10 million” accurately in one direct item and one age-appropriate contextual application.
NA-WN-002	P5-W01-KP2	1	1	Numbers to 10 million	NA-WN	Number & Algebra	Develop	MOE Core	Interpret place value to millions	Demonstrate “Interpret place value to millions” accurately in one direct item and one age-appropriate contextual application.
NA-WN-003	P5-W01-KP3	1	1	Numbers to 10 million	NA-WN	Number & Algebra	Develop	MOE Core	Compare and order large numbers	Demonstrate “Compare and order large numbers” accurately in one direct item and one age-appropriate contextual application.
NA-WN-004	P5-W01-KP4	1	1	Numbers to 10 million	NA-WN	Number & Algebra	Develop	Advanced Bridge / Extension	Solve digit-constraint problems	Demonstrate “Solve digit-constraint problems” accurately in one direct item and one age-appropriate contextual application.
NA-MD-001	P5-W02-KP1	2	1	Multiplying and dividing by powers of ten	NA-MD	Number & Algebra	Develop	MOE Core	Multiply whole numbers by 10 100 and 1000	Demonstrate “Multiply whole numbers by 10 100 and 1000” accurately in one direct item and one age-appropriate contextual application.
NA-MD-002	P5-W02-KP2	2	1	Multiplying and dividing by powers of ten	NA-MD	Number & Algebra	Develop	MOE Core	Divide whole numbers by 10 100 and 1000	Demonstrate “Divide whole numbers by 10 100 and 1000” accurately in one direct item and one age-appropriate contextual application.
NA-MD-003	P5-W02-KP3	2	1	Multiplying and dividing by powers of ten	NA-MD	Number & Algebra	Develop	MOE Core	Extend to their multiples	Demonstrate “Extend to their multiples” accurately in one direct item and one age-appropriate contextual application.
PS-REASON-001	P5-W02-KP4	2	1	Multiplying and dividing by powers of ten	PS-REASON	Number & Algebra	Develop	MOE Core	Explain place-value shifts without adding zeros mechanically	Demonstrate “Explain place-value shifts without adding zeros mechanically” by giving a correct conclusion and a mathematically valid reason.
NA-AS-001	P5-W03-KP1	3	1	Four operations and order of operations	NA-AS	Number & Algebra	Develop	MOE Core	Consolidate addition subtraction multiplication and division of whole numbers	Demonstrate “Consolidate addition subtraction multiplication and division of whole numbers” accurately in one direct item and one age-appropriate contextual application.
NA-AS-002	P5-W03-KP2	3	1	Four operations and order of operations	NA-AS	Number & Algebra	Develop	MOE Core	Apply multiplication and division before addition and subtraction	Demonstrate “Apply multiplication and division before addition and subtraction” accurately in one direct item and one age-appropriate contextual application.
NA-AS-003	P5-W03-KP3	3	1	Four operations and order of operations	NA-AS	Number & Algebra	Develop	MOE Core	Use brackets correctly	Demonstrate “Use brackets correctly” accurately in one direct item and one age-appropriate contextual application.
NA-AS-004	P5-W03-KP4	3	1	Four operations and order of operations	NA-AS	Number & Algebra	Develop	MOE Core	Evaluate multi-operation expressions	Demonstrate “Evaluate multi-operation expressions” accurately in one direct item and one age-appropriate contextual application.
PS-CHECK-001	P5-W03-KP5	3	1	Four operations and order of operations	PS-CHECK	Number & Algebra	Develop	MOE Core	Estimate and verify results	Demonstrate “Estimate and verify results” by identifying or preventing an error and showing a valid check.
NA-FR-001	P5-W04-KP1	4	1	Fraction and division	NA-FR	Number & Algebra	Develop	MOE Core	Express whole-number division as a fraction	Demonstrate “Express whole-number division as a fraction” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-002	P5-W04-KP2	4	1	Fraction and division	NA-FR	Number & Algebra	Develop	MOE Core	Express fractions as decimals	Demonstrate “Express fractions as decimals” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-003	P5-W04-KP3	4	1	Fraction and division	NA-FR	Number & Algebra	Develop	MOE Core	Interpret fraction as quotient	Demonstrate “Interpret fraction as quotient” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-004	P5-W04-KP4	4	1	Fraction and division	NA-FR	Number & Algebra	Develop	MOE Core	Locate quotient fractions on number lines	Demonstrate “Locate quotient fractions on number lines” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-005	P5-W05-KP1	5	1	Adding and subtracting mixed numbers	NA-FR	Number & Algebra	Develop	MOE Core	Add mixed numbers	Demonstrate “Add mixed numbers” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-006	P5-W05-KP2	5	1	Adding and subtracting mixed numbers	NA-FR	Number & Algebra	Develop	MOE Core	Subtract mixed numbers with renaming	Demonstrate “Subtract mixed numbers with renaming” with an appropriate fraction model or calculation and a simplified final answer where required.

KP ID	Week KP ID	Annual Week	Term	Weekly Focus	Spiral Family	Domain	Learning Stage	Core Status	Atomic Knowledge Point	Assessable Evidence
NA-FR-007	P5-W05-KP3	5	1	Adding and subtracting mixed numbers	NA-FR	Number & Algebra	Develop	MOE Core	Simplify answers	Demonstrate “Simplify answers” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-008	P5-W05-KP4	5	1	Adding and subtracting mixed numbers	NA-FR	Number & Algebra	Develop	MOE Core	Estimate using benchmark fractions	Demonstrate “Estimate using benchmark fractions” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-009	P5-W06-KP1	6	1	Multiplying fractions by whole numbers	NA-FR	Number & Algebra	Develop	MOE Core	Multiply proper and improper fractions by whole numbers	Demonstrate “Multiply proper and improper fractions by whole numbers” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-010	P5-W06-KP2	6	1	Multiplying fractions by whole numbers	NA-FR	Number & Algebra	Develop	MOE Core	Multiply mixed numbers by whole numbers	Demonstrate “Multiply mixed numbers by whole numbers” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-011	P5-W06-KP3	6	1	Multiplying fractions by whole numbers	NA-FR	Number & Algebra	Develop	MOE Core	Use cancellation efficiently	Demonstrate “Use cancellation efficiently” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-012	P5-W06-KP4	6	1	Multiplying fractions by whole numbers	NA-FR	Number & Algebra	Develop	MOE Core	Solve fraction-of-quantity problems	Demonstrate “Solve fraction-of-quantity problems” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-013	P5-W07-KP1	7	1	Multiplying fractions	NA-FR	Number & Algebra	Develop	MOE Core	Multiply proper fractions	Demonstrate “Multiply proper fractions” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-014	P5-W07-KP2	7	1	Multiplying fractions	NA-FR	Number & Algebra	Develop	MOE Core	Multiply proper by improper fractions	Demonstrate “Multiply proper by improper fractions” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-015	P5-W07-KP3	7	1	Multiplying fractions	NA-FR	Number & Algebra	Develop	MOE Core	Multiply two improper fractions	Demonstrate “Multiply two improper fractions” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-016	P5-W07-KP4	7	1	Multiplying fractions	NA-FR	Number & Algebra	Develop	MOE Core	Interpret multiplication of fractions with models	Demonstrate “Interpret multiplication of fractions with models” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-017	P5-W08-KP1	8	1	Fraction word problems	NA-FR	Problem Solving & Mathematical Processes	Develop	MOE Core	Solve multi-step fraction problems	Demonstrate “Solve multi-step fraction problems” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-018	P5-W08-KP2	8	1	Fraction word problems	NA-FR	Problem Solving & Mathematical Processes	Develop	MOE Core	Find a fraction of a remainder	Demonstrate “Find a fraction of a remainder” with an appropriate fraction model or calculation and a simplified final answer where required.
PS-MODEL-001	P5-W08-KP3	8	1	Fraction word problems	PS-MODEL	Problem Solving & Mathematical Processes	Develop	MOE Core	Use bar models for successive parts	Demonstrate “Use bar models for successive parts” using an accurate labelled model that leads to the answer.
PS-CHECK-002	P5-W08-KP4	8	1	Fraction word problems	PS-CHECK	Problem Solving & Mathematical Processes	Develop	MOE Core	Check answers against the whole	Demonstrate “Check answers against the whole” by identifying or preventing an error and showing a valid check.
MG-MEAS-001	P5-W09-KP1	9	1	Area of triangle	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Identify a base and corresponding perpendicular height	Demonstrate “Identify a base and corresponding perpendicular height” with correct measurement, calculation, notation and units.
MG-MEAS-002	P5-W09-KP2	9	1	Area of triangle	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Derive and use triangle area formula	Demonstrate “Derive and use triangle area formula” with correct measurement, calculation, notation and units.
MG-MEAS-003	P5-W09-KP3	9	1	Area of triangle	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Find a missing base or height	Demonstrate “Find a missing base or height” with correct measurement, calculation, notation and units.
MG-MEAS-004	P5-W09-KP4	9	1	Area of triangle	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Find composite areas with triangles	Demonstrate “Find composite areas with triangles” with correct measurement, calculation, notation and units.
NA-FR-019	P5-W10-KP1	10	1	Term 1 mastery and transfer	NA-FR	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Retrieve large numbers operations and fractions	Demonstrate “Retrieve large numbers operations and fractions” with an appropriate fraction model or calculation and a simplified final answer where required.
MG-MEAS-005	P5-W10-KP2	10	1	Term 1 mastery and transfer	MG-MEAS	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Apply triangle area	Demonstrate “Apply triangle area” with correct measurement, calculation, notation and units.
NA-FR-020	P5-W10-KP3	10	1	Term 1 mastery and transfer	NA-FR	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Solve multi-step fraction problems	Demonstrate “Solve multi-step fraction problems” with an appropriate fraction model or calculation and a simplified final answer where required.

KP ID	Week KP ID	Annual Week	Term	Weekly Focus	Spiral Family	Domain	Learning Stage	Core Status	Atomic Knowledge Point	Assessable Evidence
PS-REASON-002	P5-W10-KP4	10	1	Term 1 mastery and transfer	PS-REASON	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Use estimation and cancellation	Demonstrate “Use estimation and cancellation” by giving a correct conclusion and a mathematically valid reason.
PS-REASON-003	P5-W10-KP5	10	1	Term 1 mastery and transfer	PS-REASON	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Complete one advanced challenge	Demonstrate “Complete one advanced challenge” by giving a correct conclusion and a mathematically valid reason.
MG-MEAS-006	P5-W11-KP1	11	2	Volume concepts, unit cubes and representations	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Build solids with unit cubes	Demonstrate “Build solids with unit cubes” with correct measurement, calculation, notation and units.
MG-MEAS-007	P5-W11-KP2	11	2	Volume concepts, unit cubes and representations	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Measure volume in cubic units cubic centimetres and cubic metres	Demonstrate “Measure volume in cubic units cubic centimetres and cubic metres” with correct measurement, calculation, notation and units.
MG-MEAS-008	P5-W11-KP3	11	2	Volume concepts, unit cubes and representations	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Draw cubes and cuboids on an isometric grid	Demonstrate “Draw cubes and cuboids on an isometric grid” with correct measurement, calculation, notation and units.
MG-MEAS-009	P5-W11-KP4	11	2	Volume concepts, unit cubes and representations	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Find the volume of a cube or cuboid	Demonstrate “Find the volume of a cube or cuboid” with correct measurement, calculation, notation and units.
MG-MEAS-010	P5-W11-KP5	11	2	Volume concepts, unit cubes and representations	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Relate millilitres and litres to cubic centimetres	Demonstrate “Relate millilitres and litres to cubic centimetres” with correct measurement, calculation, notation and units.
MG-MEAS-011	P5-W12-KP1	12	2	Volume and rectangular-tank applications	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Find the volume of a rectangular tank	Demonstrate “Find the volume of a rectangular tank” with correct measurement, calculation, notation and units.
MG-MEAS-012	P5-W12-KP2	12	2	Volume and rectangular-tank applications	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Find the volume of liquid in a rectangular tank	Demonstrate “Find the volume of liquid in a rectangular tank” with correct measurement, calculation, notation and units.
MG-MEAS-013	P5-W12-KP3	12	2	Volume and rectangular-tank applications	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Compare volumes using consistent cubic units	Demonstrate “Compare volumes using consistent cubic units” with correct measurement, calculation, notation and units.
MG-MEAS-014	P5-W12-KP4	12	2	Volume and rectangular-tank applications	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Solve volume problems involving millilitres litres and cubic centimetres	Demonstrate “Solve volume problems involving millilitres litres and cubic centimetres” with correct measurement, calculation, notation and units.
NA-DEC-001	P5-W13-KP1	13	2	Decimal operations and powers of ten	NA-DEC	Number & Algebra	Develop	MOE Core	Add and subtract decimals accurately	Demonstrate “Add and subtract decimals accurately” using correct place value, alignment and stated accuracy where required.
NA-DEC-002	P5-W13-KP2	13	2	Decimal operations and powers of ten	NA-DEC	Number & Algebra	Develop	MOE Core	Multiply and divide decimals within syllabus limits	Demonstrate “Multiply and divide decimals within syllabus limits” using correct place value, alignment and stated accuracy where required.
NA-DEC-003	P5-W13-KP3	13	2	Decimal operations and powers of ten	NA-DEC	Number & Algebra	Develop	MOE Core	Multiply and divide decimals by 10 100 and 1000	Demonstrate “Multiply and divide decimals by 10 100 and 1000” using correct place value, alignment and stated accuracy where required.
NA-DEC-004	P5-W13-KP4	13	2	Decimal operations and powers of ten	NA-DEC	Number & Algebra	Develop	MOE Core	Extend powers-of-ten reasoning to their multiples	Demonstrate “Extend powers-of-ten reasoning to their multiples” using correct place value, alignment and stated accuracy where required.
PS-CHECK-003	P5-W13-KP5	13	2	Decimal operations and powers of ten	PS-CHECK	Number & Algebra	Develop	MOE Core	Estimate and verify decimal results	Demonstrate “Estimate and verify decimal results” by identifying or preventing an error and showing a valid check.
MG-MEAS-015	P5-W14-KP1	14	2	Measurement conversions in decimal form	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Convert km and m	Demonstrate “Convert km and m” with correct measurement, calculation, notation and units.
MG-MEAS-016	P5-W14-KP2	14	2	Measurement conversions in decimal form	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Convert m and cm	Demonstrate “Convert m and cm” with correct measurement, calculation, notation and units.
MG-MEAS-017	P5-W14-KP3	14	2	Measurement conversions in decimal form	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Convert kg and g	Demonstrate “Convert kg and g” with correct measurement, calculation, notation and units.
MG-MEAS-018	P5-W14-KP4	14	2	Measurement conversions in decimal form	MG-MEAS	Measurement & Geometry	Develop	MOE Core	Convert L and mL	Demonstrate “Convert L and mL” with correct measurement, calculation, notation and units.
NA-PROP-001	P5-W15-KP1	15	2	Rate concepts	NA-PROP	Number & Algebra	Introduce	MOE Core	Interpret rate as amount per unit	Demonstrate “Interpret rate as amount per unit” using a correct proportional representation, calculation and contextual interpretation.

KP ID	Week KP ID	Annual Week	Term	Weekly Focus	Spiral Family	Domain	Learning Stage	Core Status	Atomic Knowledge Point	Assessable Evidence
NA-PROP-002	P5-W15-KP2	15	2	Rate concepts	NA-PROP	Number & Algebra	Introduce	MOE Core	Find rate	Demonstrate “Find rate” using a correct proportional representation, calculation and contextual interpretation.
NA-PROP-003	P5-W15-KP3	15	2	Rate concepts	NA-PROP	Number & Algebra	Introduce	MOE Core	Find total amount	Demonstrate “Find total amount” using a correct proportional representation, calculation and contextual interpretation.
NA-PROP-004	P5-W15-KP4	15	2	Rate concepts	NA-PROP	Number & Algebra	Introduce	MOE Core	Find number of units	Demonstrate “Find number of units” using a correct proportional representation, calculation and contextual interpretation.
NA-PROP-005	P5-W16-KP1	16	2	Rate word problems	NA-PROP	Problem Solving & Mathematical Processes	Develop	MOE Core	Solve rate problems with proportional reasoning	Demonstrate “Solve rate problems with proportional reasoning” using a correct proportional representation, calculation and contextual interpretation.
NA-PROP-006	P5-W16-KP2	16	2	Rate word problems	NA-PROP	Problem Solving & Mathematical Processes	Develop	MOE Core	Use tables and unitary method	Demonstrate “Use tables and unitary method” using a correct proportional representation, calculation and contextual interpretation.
NA-PROP-007	P5-W16-KP3	16	2	Rate word problems	NA-PROP	Problem Solving & Mathematical Processes	Develop	MOE Core	Compare two rates	Demonstrate “Compare two rates” using a correct proportional representation, calculation and contextual interpretation.
NA-PROP-008	P5-W16-KP4	16	2	Rate word problems	NA-PROP	Problem Solving & Mathematical Processes	Develop	MOE Core	Track compound units accurately	Demonstrate “Track compound units accurately” using a correct proportional representation, calculation and contextual interpretation.
NA-PCT-001	P5-W17-KP1	17	2	Percentage meaning	NA-PCT	Number & Algebra	Introduce	MOE Core	Express part of a whole as a percentage	Demonstrate “Express part of a whole as a percentage” using a correct proportional representation, calculation and contextual interpretation.
NA-PCT-002	P5-W17-KP2	17	2	Percentage meaning	NA-PCT	Number & Algebra	Introduce	MOE Core	Use % correctly	Demonstrate “Use % correctly” using a correct proportional representation, calculation and contextual interpretation.
NA-PCT-003	P5-W17-KP3	17	2	Percentage meaning	NA-PCT	Number & Algebra	Introduce	MOE Core	Connect fractions decimals and percentages	Demonstrate “Connect fractions decimals and percentages” using a correct proportional representation, calculation and contextual interpretation.
NA-PCT-004	P5-W17-KP4	17	2	Percentage meaning	NA-PCT	Number & Algebra	Introduce	MOE Core	Estimate common percentages	Demonstrate “Estimate common percentages” using a correct proportional representation, calculation and contextual interpretation.
NA-PCT-005	P5-W18-KP1	18	2	Percentage of a quantity	NA-PCT	Number & Algebra	Develop	MOE Core	Find a percentage part of a whole	Demonstrate “Find a percentage part of a whole” using a correct proportional representation, calculation and contextual interpretation.
NA-PCT-006	P5-W18-KP2	18	2	Percentage of a quantity	NA-PCT	Number & Algebra	Develop	MOE Core	Use 1% 10% and benchmark strategies	Demonstrate “Use 1% 10% and benchmark strategies” using a correct proportional representation, calculation and contextual interpretation.
NA-PCT-007	P5-W18-KP3	18	2	Percentage of a quantity	NA-PCT	Number & Algebra	Develop	MOE Core	Solve percentage word problems	Demonstrate “Solve percentage word problems” using a correct proportional representation, calculation and contextual interpretation.
PS-CHECK-004	P5-W18-KP4	18	2	Percentage of a quantity	PS-CHECK	Number & Algebra	Develop	MOE Core	Check percentage answers against the whole	Demonstrate “Check percentage answers against the whole” by identifying or preventing an error and showing a valid check.
NA-PCT-008	P5-W19-KP1	19	2	Financial percentage	NA-PCT	Problem Solving & Mathematical Processes	Develop	MOE Core	Find discount	Demonstrate “Find discount” using a correct proportional representation, calculation and contextual interpretation.
NA-PCT-009	P5-W19-KP2	19	2	Financial percentage	NA-PCT	Problem Solving & Mathematical Processes	Develop	MOE Core	Find GST in syllabus contexts	Demonstrate “Find GST in syllabus contexts” using a correct proportional representation, calculation and contextual interpretation.
NA-PCT-010	P5-W19-KP3	19	2	Financial percentage	NA-PCT	Problem Solving & Mathematical Processes	Develop	MOE Core	Find simple annual interest	Demonstrate “Find simple annual interest” using a correct proportional representation, calculation and contextual interpretation.
NA-PCT-011	P5-W19-KP4	19	2	Financial percentage	NA-PCT	Problem Solving & Mathematical Processes	Develop	MOE Core	Compare final prices	Demonstrate “Compare final prices” using a correct proportional representation, calculation and contextual interpretation.
MG-MEAS-019	P5-W20-KP1	20	2	Term 2 mastery and reasoning	MG-MEAS	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Retrieve volume decimals rate and percentage	Demonstrate “Retrieve volume decimals rate and percentage” with correct measurement, calculation, notation and units.
PS-REASON-004	P5-W20-KP2	20	2	Term 2 mastery and reasoning	PS-REASON	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Solve unit-conversion problems	Demonstrate “Solve unit-conversion problems” by giving a correct conclusion and a mathematically valid reason.

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NA-PROP-009	P5-W20-KP3	20	2	Term 2 mastery and reasoning	NA-PROP	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Compare rates and prices	Demonstrate “Compare rates and prices” using a correct proportional representation, calculation and contextual interpretation.
NA-PCT-012	P5-W20-KP4	20	2	Term 2 mastery and reasoning	NA-PCT	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Use fraction-decimal-percentage links	Demonstrate “Use fraction-decimal-percentage links” using a correct proportional representation, calculation and contextual interpretation.
PS-REASON-005	P5-W20-KP5	20	2	Term 2 mastery and reasoning	PS-REASON	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Explain solution efficiency	Demonstrate “Explain solution efficiency” by giving a correct conclusion and a mathematically valid reason.
MG-GEO-001	P5-W21-KP1	21	3	Angles and angle facts	MG-GEO	Measurement & Geometry	Develop / Apply	MOE Core	Use angles on a line and at a point	Demonstrate “Use angles on a line and at a point” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-002	P5-W21-KP2	21	3	Angles and angle facts	MG-GEO	Measurement & Geometry	Develop / Apply	MOE Core	Use vertically opposite angles	Demonstrate “Use vertically opposite angles” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-003	P5-W21-KP3	21	3	Angles and angle facts	MG-GEO	Measurement & Geometry	Develop / Apply	MOE Core	Find unknown angles in multi-step diagrams	Demonstrate “Find unknown angles in multi-step diagrams” using an accurate diagram, stated property or geometric construction as appropriate.
PS-REASON-006	P5-W21-KP4	21	3	Angles and angle facts	PS-REASON	Measurement & Geometry	Develop / Apply	MOE Core	State reasons accurately	Demonstrate “State reasons accurately” by giving a correct conclusion and a mathematically valid reason.
MG-GEO-004	P5-W22-KP1	22	3	Properties of triangles	MG-GEO	Measurement & Geometry	Develop / Apply	MOE Core	Classify triangles by sides and angles	Demonstrate “Classify triangles by sides and angles” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-005	P5-W22-KP2	22	3	Properties of triangles	MG-GEO	Measurement & Geometry	Develop / Apply	MOE Core	Use isosceles triangle properties	Demonstrate “Use isosceles triangle properties” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-006	P5-W22-KP3	22	3	Properties of triangles	MG-GEO	Measurement & Geometry	Develop / Apply	MOE Core	Use equilateral triangle properties	Demonstrate “Use equilateral triangle properties” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-007	P5-W22-KP4	22	3	Properties of triangles	MG-GEO	Measurement & Geometry	Develop / Apply	MOE Core	Use angle sum of a triangle	Demonstrate “Use angle sum of a triangle” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-008	P5-W23-KP1	23	3	Unknown angles in triangles	MG-GEO	Measurement & Geometry	Develop / Apply	MOE Core	Find missing triangle angles	Demonstrate “Find missing triangle angles” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-009	P5-W23-KP2	23	3	Unknown angles in triangles	MG-GEO	Measurement & Geometry	Develop / Apply	MOE Core	Combine line point and triangle facts	Demonstrate “Combine line point and triangle facts” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-010	P5-W23-KP3	23	3	Unknown angles in triangles	MG-GEO	Measurement & Geometry	Develop / Apply	Advanced Bridge / Extension	Use exterior-angle reasoning as an extension	Demonstrate “Use exterior-angle reasoning as an extension” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-011	P5-W23-KP4	23	3	Unknown angles in triangles	MG-GEO	Measurement & Geometry	Develop / Apply	MOE Core	Distinguish marked facts from visual assumptions	Demonstrate “Distinguish marked facts from visual assumptions” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-012	P5-W24-KP1	24	3	Properties of parallelograms rhombuses and trapeziums	MG-GEO	Measurement & Geometry	Develop / Apply	MOE Core	Identify defining properties	Demonstrate “Identify defining properties” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-013	P5-W24-KP2	24	3	Properties of parallelograms rhombuses and trapeziums	MG-GEO	Measurement & Geometry	Develop / Apply	MOE Core	Use parallel-side angle relationships in guided cases	Demonstrate “Use parallel-side angle relationships in guided cases” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-014	P5-W24-KP3	24	3	Properties of parallelograms rhombuses and trapeziums	MG-GEO	Measurement & Geometry	Develop / Apply	MOE Core	Compare quadrilaterals	Demonstrate “Compare quadrilaterals” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-015	P5-W24-KP4	24	3	Properties of parallelograms rhombuses and trapeziums	MG-GEO	Measurement & Geometry	Develop / Apply	MOE Core	Find unknown angles using properties	Demonstrate “Find unknown angles using properties” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-016	P5-W25-KP1	25	3	Composite geometric figures	MG-GEO	Measurement & Geometry	Develop / Apply	MOE Core	Combine triangle and quadrilateral properties	Demonstrate “Combine triangle and quadrilateral properties” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-017	P5-W25-KP2	25	3	Composite geometric figures	MG-GEO	Measurement & Geometry	Develop / Apply	MOE Core	Find unknown angles without extra construction	Demonstrate “Find unknown angles without extra construction” using an accurate diagram, stated property or geometric construction as appropriate.

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MG-MEAS-020	P5-W25-KP3	25	3	Composite geometric figures	MG-MEAS	Measurement & Geometry	Develop / Apply	MOE Core	Find missing lengths from perimeter	Demonstrate “Find missing lengths from perimeter” with correct measurement, calculation, notation and units.
PS-REASON-007	P5-W25-KP4	25	3	Composite geometric figures	PS-REASON	Measurement & Geometry	Develop / Apply	MOE Core	Explain a chain of geometric reasoning	Demonstrate “Explain a chain of geometric reasoning” by giving a correct conclusion and a mathematically valid reason.
ST-DATA-001	P5-W26-KP1	26	3	Data representation retrieval	ST-DATA	Statistics	Consolidate	Spiral Maintenance / Transfer	Interpret tables line graphs and pie charts	Demonstrate “Interpret tables line graphs and pie charts” by extracting or organising data accurately and supporting the answer with evidence.
ST-DATA-002	P5-W26-KP2	26	3	Data representation retrieval	ST-DATA	Statistics	Consolidate	Spiral Maintenance / Transfer	Compare multiple representations	Demonstrate “Compare multiple representations” by extracting or organising data accurately and supporting the answer with evidence.
ST-DATA-003	P5-W26-KP3	26	3	Data representation retrieval	ST-DATA	Statistics	Consolidate	Spiral Maintenance / Transfer	Calculate totals and differences	Demonstrate “Calculate totals and differences” by extracting or organising data accurately and supporting the answer with evidence.
ST-DATA-004	P5-W26-KP4	26	3	Data representation retrieval	ST-DATA	Statistics	Consolidate	Spiral Maintenance / Transfer	Identify misleading or incomplete claims	Demonstrate “Identify misleading or incomplete claims” by extracting or organising data accurately and supporting the answer with evidence.
ST-DATA-005	P5-W27-KP1	27	3	Average introduction (advanced bridge)	ST-DATA	Statistics	Extend	Advanced Bridge / Extension	Interpret average as equal sharing	Demonstrate “Interpret average as equal sharing” by extracting or organising data accurately and supporting the answer with evidence.
ST-DATA-006	P5-W27-KP2	27	3	Average introduction (advanced bridge)	ST-DATA	Statistics	Extend	Advanced Bridge / Extension	Find a simple average	Demonstrate “Find a simple average” by extracting or organising data accurately and supporting the answer with evidence.
ST-DATA-007	P5-W27-KP3	27	3	Average introduction (advanced bridge)	ST-DATA	Statistics	Extend	Advanced Bridge / Extension	Find a total from average and number of items	Demonstrate “Find a total from average and number of items” by extracting or organising data accurately and supporting the answer with evidence.
ST-DATA-008	P5-W27-KP4	27	3	Average introduction (advanced bridge)	ST-DATA	Statistics	Extend	Advanced Bridge / Extension	Compare average with individual values	Demonstrate “Compare average with individual values” by extracting or organising data accurately and supporting the answer with evidence.
NA-ALG-001	P5-W28-KP1	28	3	Algebraic thinking bridge	NA-ALG	Number & Algebra	Develop / Apply	Advanced Bridge / Extension	Use a symbol or letter for an unknown	Demonstrate “Use a symbol or letter for an unknown” using a correct rule, expression or equation and verify the result where appropriate.
NA-ALG-002	P5-W28-KP2	28	3	Algebraic thinking bridge	NA-ALG	Number & Algebra	Develop / Apply	Advanced Bridge / Extension	Translate simple verbal relationships	Demonstrate “Translate simple verbal relationships” using a correct rule, expression or equation and verify the result where appropriate.
NA-ALG-003	P5-W28-KP3	28	3	Algebraic thinking bridge	NA-ALG	Number & Algebra	Develop / Apply	Advanced Bridge / Extension	Evaluate a simple expression by substitution	Demonstrate “Evaluate a simple expression by substitution” using a correct rule, expression or equation and verify the result where appropriate.
NA-ALG-004	P5-W28-KP4	28	3	Algebraic thinking bridge	NA-ALG	Number & Algebra	Develop / Apply	Advanced Bridge / Extension	Solve simple missing-value equations	Demonstrate “Solve simple missing-value equations” using a correct rule, expression or equation and verify the result where appropriate.
NA-PCT-013	P5-W29-KP1	29	3	Multi-step model method	NA-PCT	Problem Solving & Mathematical Processes	Develop / Apply	MOE Core	Model fractions percentages and rates	Demonstrate “Model fractions percentages and rates” using a correct proportional representation, calculation and contextual interpretation.
PS-MODEL-002	P5-W29-KP2	29	3	Multi-step model method	PS-MODEL	Problem Solving & Mathematical Processes	Develop / Apply	MOE Core	Use before-after bars	Demonstrate “Use before-after bars” using an accurate labelled model that leads to the answer.
PS-MODEL-003	P5-W29-KP3	29	3	Multi-step model method	PS-MODEL	Problem Solving & Mathematical Processes	Develop / Apply	MOE Core	Identify a common unit	Demonstrate “Identify a common unit” using an accurate labelled model that leads to the answer.
NA-ALG-005	P5-W29-KP4	29	3	Multi-step model method	NA-ALG	Problem Solving & Mathematical Processes	Develop / Apply	MOE Core	Write equations from models	Demonstrate “Write equations from models” using a correct rule, expression or equation and verify the result where appropriate.
ST-DATA-009	P5-W30-KP1	30	3	Term 3 mastery and application	ST-DATA	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Integrate percentage rate geometry and data	Demonstrate “Integrate percentage rate geometry and data” by extracting or organising data accurately and supporting the answer with evidence.
PS-REASON-008	P5-W30-KP2	30	3	Term 3 mastery and application	PS-REASON	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Solve a three-step structured problem	Demonstrate “Solve a three-step structured problem” by giving a correct conclusion and a mathematically valid reason.
PS-REASON-009	P5-W30-KP3	30	3	Term 3 mastery and application	PS-REASON	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Explain geometric reasons	Demonstrate “Explain geometric reasons” by giving a correct conclusion and a mathematically valid reason.

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NA-ALG-006	P5-W30-KP4	30	3	Term 3 mastery and application	NA-ALG	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Evaluate a simple expression	Demonstrate “Evaluate a simple expression” using a correct rule, expression or equation and verify the result where appropriate.
PS-REASON-010	P5-W30-KP5	30	3	Term 3 mastery and application	PS-REASON	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Review errors by KP	Demonstrate “Review errors by KP” by giving a correct conclusion and a mathematically valid reason.
NA-FR-021	P5-W31-KP1	31	4	Advanced fraction patterns	NA-FR	Number & Algebra	Extend	Advanced Bridge / Extension	Use fraction products to compare quantities	Demonstrate “Use fraction products to compare quantities” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-022	P5-W31-KP2	31	4	Advanced fraction patterns	NA-FR	Number & Algebra	Extend	Advanced Bridge / Extension	Find missing factors in fraction equations	Demonstrate “Find missing factors in fraction equations” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-023	P5-W31-KP3	31	4	Advanced fraction patterns	NA-FR	Number & Algebra	Extend	Advanced Bridge / Extension	Reason about scaling by a fraction	Demonstrate “Reason about scaling by a fraction” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-FR-024	P5-W31-KP4	31	4	Advanced fraction patterns	NA-FR	Number & Algebra	Extend	Advanced Bridge / Extension	Solve a fraction pattern problem	Demonstrate “Solve a fraction pattern problem” with an appropriate fraction model or calculation and a simplified final answer where required.
NA-PCT-014	P5-W32-KP1	32	4	Advanced percentage problems	NA-PCT	Problem Solving & Mathematical Processes	Extend	Advanced Bridge / Extension	Find original price in guided cases	Demonstrate “Find original price in guided cases” using a correct proportional representation, calculation and contextual interpretation.
NA-PCT-015	P5-W32-KP2	32	4	Advanced percentage problems	NA-PCT	Problem Solving & Mathematical Processes	Extend	Advanced Bridge / Extension	Solve successive discount contexts as extension	Demonstrate “Solve successive discount contexts as extension” using a correct proportional representation, calculation and contextual interpretation.
NA-PCT-016	P5-W32-KP3	32	4	Advanced percentage problems	NA-PCT	Problem Solving & Mathematical Processes	Extend	Advanced Bridge / Extension	Compare percentage and absolute change	Demonstrate “Compare percentage and absolute change” using a correct proportional representation, calculation and contextual interpretation.
PS-MODEL-004	P5-W32-KP4	32	4	Advanced percentage problems	PS-MODEL	Problem Solving & Mathematical Processes	Extend	Advanced Bridge / Extension	Use before-after models	Demonstrate “Use before-after models” using an accurate labelled model that leads to the answer.
MG-MEAS-021	P5-W33-KP1	33	4	Advanced rate and volume	MG-MEAS	Problem Solving & Mathematical Processes	Extend	Advanced Bridge / Extension	Combine rate with volume	Demonstrate “Combine rate with volume” with correct measurement, calculation, notation and units.
MG-MEAS-022	P5-W33-KP2	33	4	Advanced rate and volume	MG-MEAS	Problem Solving & Mathematical Processes	Extend	Advanced Bridge / Extension	Solve filling and emptying situations without simultaneous rates	Demonstrate “Solve filling and emptying situations without simultaneous rates” with correct measurement, calculation, notation and units.
MG-MEAS-023	P5-W33-KP3	33	4	Advanced rate and volume	MG-MEAS	Problem Solving & Mathematical Processes	Extend	Advanced Bridge / Extension	Convert units before applying rate	Demonstrate “Convert units before applying rate” with correct measurement, calculation, notation and units.
MG-MEAS-024	P5-W33-KP4	33	4	Advanced rate and volume	MG-MEAS	Problem Solving & Mathematical Processes	Extend	Advanced Bridge / Extension	Judge whether a rate answer is realistic	Demonstrate “Judge whether a rate answer is realistic” with correct measurement, calculation, notation and units.
MG-GEO-018	P5-W34-KP1	34	4	Advanced geometry	MG-GEO	Measurement & Geometry	Extend	Advanced Bridge / Extension	Solve multi-step unknown-angle problems	Demonstrate “Solve multi-step unknown-angle problems” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-019	P5-W34-KP2	34	4	Advanced geometry	MG-GEO	Measurement & Geometry	Extend	Advanced Bridge / Extension	Use symmetry and quadrilateral properties	Demonstrate “Use symmetry and quadrilateral properties” using an accurate diagram, stated property or geometric construction as appropriate.
MG-GEO-020	P5-W34-KP3	34	4	Advanced geometry	MG-GEO	Measurement & Geometry	Extend	Advanced Bridge / Extension	Find triangle areas in composite figures	Demonstrate “Find triangle areas in composite figures” using an accurate diagram, stated property or geometric construction as appropriate.
PS-REASON-011	P5-W34-KP4	34	4	Advanced geometry	PS-REASON	Measurement & Geometry	Extend	Advanced Bridge / Extension	Reason from partial diagrams	Demonstrate “Reason from partial diagrams” by giving a correct conclusion and a mathematically valid reason.
ST-DATA-010	P5-W35-KP1	35	4	Data investigation and average	ST-DATA	Statistics	Consolidate	MOE Core + Advanced Bridge	Collect numerical data	Demonstrate “Collect numerical data” by extracting or organising data accurately and supporting the answer with evidence.
ST-DATA-011	P5-W35-KP2	35	4	Data investigation and average	ST-DATA	Statistics	Consolidate	Advanced Bridge / Extension	Calculate and interpret average	Demonstrate “Calculate and interpret average” by extracting or organising data accurately and supporting the answer with evidence.
ST-DATA-012	P5-W35-KP3	35	4	Data investigation and average	ST-DATA	Statistics	Consolidate	MOE Core + Advanced Bridge	Choose a suitable representation	Demonstrate “Choose a suitable representation” by extracting or organising data accurately and supporting the answer with evidence.

KP ID	Week KP ID	Annual Week	Term	Weekly Focus	Spiral Family	Domain	Learning Stage	Core Status	Atomic Knowledge Point	Assessable Evidence
PS-REASON-012	P5-W35-KP4	35	4	Data investigation and average	PS-REASON	Statistics	Consolidate	MOE Core + Advanced Bridge	State a conclusion and limitation	Demonstrate “State a conclusion and limitation” by giving a correct conclusion and a mathematically valid reason.
PS-HEUR-001	P5-W36-KP1	36	4	Heuristics for upper primary	PS-HEUR	Problem Solving & Mathematical Processes	Consolidate	MOE Core	Use working backward	Demonstrate “Use working backward” by selecting and applying a suitable strategy to a scaffolded unfamiliar problem.
PS-HEUR-002	P5-W36-KP2	36	4	Heuristics for upper primary	PS-HEUR	Problem Solving & Mathematical Processes	Consolidate	MOE Core	Use before-after	Demonstrate “Use before-after” by selecting and applying a suitable strategy to a scaffolded unfamiliar problem.
PS-HEUR-003	P5-W36-KP3	36	4	Heuristics for upper primary	PS-HEUR	Problem Solving & Mathematical Processes	Consolidate	MOE Core	Make an assumption in guided cases	Demonstrate “Make an assumption in guided cases” by selecting and applying a suitable strategy to a scaffolded unfamiliar problem.
ST-DATA-013	P5-W36-KP4	36	4	Heuristics for upper primary	ST-DATA	Problem Solving & Mathematical Processes	Consolidate	MOE Core	Use a systematic table	Demonstrate “Use a systematic table” by extracting or organising data accurately and supporting the answer with evidence.
NA-PCT-017	P5-W37-KP1	37	4	Non-routine multi-topic problems	NA-PCT	Problem Solving & Mathematical Processes	Consolidate	MOE Core	Connect fractions decimals percentages and rate	Demonstrate “Connect fractions decimals percentages and rate” using a correct proportional representation, calculation and contextual interpretation.
MG-MEAS-025	P5-W37-KP2	37	4	Non-routine multi-topic problems	MG-MEAS	Problem Solving & Mathematical Processes	Consolidate	MOE Core	Combine geometry and measurement	Demonstrate “Combine geometry and measurement” with correct measurement, calculation, notation and units.
PS-HEUR-004	P5-W37-KP3	37	4	Non-routine multi-topic problems	PS-HEUR	Problem Solving & Mathematical Processes	Consolidate	MOE Core	Interpret a diagram not drawn to scale	Demonstrate “Interpret a diagram not drawn to scale” by selecting and applying a suitable strategy to a scaffolded unfamiliar problem.
PS-HEUR-005	P5-W37-KP4	37	4	Non-routine multi-topic problems	PS-HEUR	Problem Solving & Mathematical Processes	Consolidate	MOE Core	Present a logically sequenced solution	Demonstrate “Present a logically sequenced solution” by selecting and applying a suitable strategy to a scaffolded unfamiliar problem.
PS-REASON-013	P5-W38-KP1	38	4	PSLE-format readiness I	PS-REASON	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Solve short-answer fluency items	Demonstrate “Solve short-answer fluency items” by giving a correct conclusion and a mathematically valid reason.
PS-REASON-014	P5-W38-KP2	38	4	PSLE-format readiness I	PS-REASON	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Solve structured multi-step items	Demonstrate “Solve structured multi-step items” by giving a correct conclusion and a mathematically valid reason.
NA-WN-005	P5-W38-KP3	38	4	PSLE-format readiness I	NA-WN	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Manage units and rounding	Demonstrate “Manage units and rounding” accurately in one direct item and one age-appropriate contextual application.
PS-CHECK-005	P5-W38-KP4	38	4	PSLE-format readiness I	PS-CHECK	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Check answers strategically	Demonstrate “Check answers strategically” by identifying or preventing an error and showing a valid check.
PS-REASON-015	P5-W39-KP1	39	4	P5 cumulative mastery	PS-REASON	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Retrieve all P5 content	Demonstrate “Retrieve all P5 content” by giving a correct conclusion and a mathematically valid reason.
PS-REASON-016	P5-W39-KP2	39	4	P5 cumulative mastery	PS-REASON	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Diagnose weak KPs	Demonstrate “Diagnose weak KPs” by giving a correct conclusion and a mathematically valid reason.
PS-REASON-017	P5-W39-KP3	39	4	P5 cumulative mastery	PS-REASON	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Redo errors with corrected reasoning	Demonstrate “Redo errors with corrected reasoning” by giving a correct conclusion and a mathematically valid reason.
PS-REASON-018	P5-W39-KP4	39	4	P5 cumulative mastery	PS-REASON	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Solve a balanced advanced set	Demonstrate “Solve a balanced advanced set” by giving a correct conclusion and a mathematically valid reason.
NA-PCT-018	P5-W40-KP1	40	4	P5 year-end mastery and P6 readiness	NA-PCT	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Master fraction decimal percentage and rate relationships	Demonstrate “Master fraction decimal percentage and rate relationships” using a correct proportional representation, calculation and contextual interpretation.
MG-MEAS-026	P5-W40-KP2	40	4	P5 year-end mastery and P6 readiness	MG-MEAS	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Master volume triangle area and geometry properties	Demonstrate “Master volume triangle area and geometry properties” with correct measurement, calculation, notation and units.
ST-DATA-014	P5-W40-KP3	40	4	P5 year-end mastery and P6 readiness	ST-DATA	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Use early algebra and average	Demonstrate “Use early algebra and average” by extracting or organising data accurately and supporting the answer with evidence.
PS-REASON-019	P5-W40-KP4	40	4	P5 year-end mastery and P6 readiness	PS-REASON	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Solve complex models and heuristics	Demonstrate “Solve complex models and heuristics” by giving a correct conclusion and a mathematically valid reason.

KP ID	Week KP ID	Annual Week	Term	Weekly Focus	Spiral Family	Domain	Learning Stage	Core Status	Atomic Knowledge Point	Assessable Evidence
PS-REASON-020	P5-W40-KP5	40	4	P5 year-end mastery and P6 readiness	PS-REASON	Problem Solving & Mathematical Processes	Master / Transfer	Spiral Maintenance / Transfer	Transfer to PSLE-style problems	Demonstrate "Transfer to PSLE-style problems" by giving a correct conclusion and a mathematically valid reason.

Primary 5 Mathematics - Spiral Progression Map

Important concepts recur at increasing depth; repetition means retrieval plus a new representation, strategy or application demand.

Spiral Family	P5 Entry Point	Development / Revisit Weeks	End-of-P5 Expectation	MOE Role	P6 Bridge	Atomic KP Count	Status
NA-WN	W1: Numbers to 10 million	W38	Read, compare and reason with numbers to 10 million; apply powers of ten and operation order.	Core	Cumulative whole-number mastery and PSLE fluency	5	Complete
NA-AS	W3: Four operations and order of operations	Embedded retrieval	Select and combine operations accurately in multi-step and modelled contexts.	Core spiral	Complex PSLE multi-step and algebra-linked operations	4	Complete
NA-MD	W2: Multiplying and dividing by powers of ten	Embedded retrieval	Use multiplicative structure across whole numbers, decimals, fractions, rate and volume.	Core	Ratio, speed and complex multiplicative comparison	3	Complete
NA-FR	W4: Fraction and division	W5, W6, W7, W8, W10, W31	Operate on mixed numbers and fractions, including fraction multiplication and multi-step fraction problems.	Core + Advanced Bridge	Four operations of fractions and ratio/percentage integration	24	Complete
NA-DEC	W13: Decimal operations and powers of ten	Embedded retrieval	Perform decimal operations, powers-of-ten reasoning, conversions and applications accurately.	Core	Cumulative decimal mastery and ratio/percentage applications	4	Complete
NA-PCT	W17: Percentage meaning	W18, W19, W20, W29, W32, W37, W40	Connect fractions, decimals and percentages; solve percentage and financial applications.	Core + Advanced Bridge	Percentage change, ratio and advanced PSLE applications	18	Complete
NA-PROP	W15: Rate concepts	W16, W20	Find rate, total or number of units; compare rates and manage compound units.	Core + Advanced Bridge	Ratio, percentage and broader proportional relationships	9	Complete
NA-ALG	W28: Algebraic thinking bridge	W29, W30	Use symbols for unknowns, translate simple relationships and evaluate simple expressions.	Advanced Bridge	Formal algebra and equations in P6	6	Complete
MG-MEAS	W9: Area of triangle	W10, W11, W12, W14, W20, W25, W33, W37, W40	Apply triangle area, volume, measurement conversions and rate-measurement links.	Core + Advanced Bridge	Reverse volume dimensions, circles and composite mensuration	26	Complete
MG-GEO	W21: Angles and angle facts	W22, W23, W24, W25, W34	Use triangle and quadrilateral properties in multi-step angle and geometric reasoning.	Core + Advanced Bridge	Angles in complex figures, circles and PSLE geometry	20	Complete
ST-DATA	W26: Data representation retrieval	W27, W30, W35, W36, W40	Interpret multiple displays and conduct data investigations; treat average as labelled P6 readiness.	Spiral maintenance + Advanced Bridge	Average and richer data analysis	14	Complete

Spiral Family	P5 Entry Point	Development / Revisit Weeks	End-of-P5 Expectation	MOE Role	P6 Bridge	Atomic KP Count	Status
PS-MODEL	W8: Fraction word problems	W29, W32	Use before-after, common-unit and multi-step models for fractions, percentage and rate.	Mathematical processes	Complex PSLE model method and ratio models	4	Complete
PS-HEUR	W36: Heuristics for upper primary	W37	Select working backward, before-after, assumptions and systematic tables for non-routine tasks.	Mathematical processes	Independent PSLE heuristic selection	5	Complete
PS-REASON	W2: Multiplying and dividing by powers of ten	W10, W20, W21, W25, W30, W34, W35, W38, W39, W40	Explain numerical, geometric, proportional and data conclusions with connected reasons.	Mathematical processes	Full PSLE reasoning and justification	20	Complete
PS-CHECK	W3: Four operations and order of operations	W8, W13, W18, W38	Use estimation, inverse operations, benchmark checks, units and realism tests.	Mathematical processes	Strategic verification under assessment conditions	5	Complete
PS-COMM	Embedded across weekly tasks	Embedded retrieval	Present equations, models, compound units, geometric reasons and structured working precisely.	Mathematical processes	Concise PSLE written communication	0	Embedded only

Primary 5 Mathematics - MOE Coverage Audit

Cross-check of P5 syllabus content and mathematical processes against the 40-week allocation.

MOE Strand / Topic	Expected P5 Scope	Allocated Weeks	Progression Check	Assessment Readiness	Advanced Boundary	Status	Source
Whole Numbers and Operations	Numbers to 10 million; powers of ten; four operations and order of operations	W1-W3, W10, W38-W40	P4 to 100 000 -> P5 to 10 million -> multi-operation expressions	Place value, operation order, estimation, constraints and multi-step application	Digit-constraint item is individually labelled extension	Complete	https://www.moe.gov.sg/media/files/primary/92bff26d -b2b4-4535-b868-b8415c744b91.pdf
Fractions	Fraction as division; mixed-number operations; multiplication of fractions; multi-step applications	W4-W8, W10, W20, W29-W32, W37-W40	P4 unlike-fraction operations -> P5 fraction multiplication and successive parts	Conversions, products, cancellation, bar models and reasonableness	Fraction scaling/pattern items are labelled extension	Complete + Advanced Bridge	https://www.moe.gov.sg/media/files/primary/92bff26d -b2b4-4535-b868-b8415c744b91.pdf
Decimals and Measurement Conversion	Decimal operations, powers of ten and metric conversions in decimal form	W13-W14, W20, W37-W40	P4 decimal algorithms -> P5 conversion and multi-topic application	Accurate computation, conversion, estimation and contextual interpretation	No premature recurring-decimal or scientific-notation work	Complete	https://www.moe.gov.sg/media/files/primary/92bff26d -b2b4-4535-b868-b8415c744b91.pdf
Percentage	Meaning, fraction-decimal links, percentage of quantity, discount, GST and simple interest	W17-W20, W29-W32, W37-W40	Representation -> benchmark strategies -> financial application -> models	Conversions, percentage part, final price and comparison	Original price and successive discounts are labelled extension	Complete + Advanced Bridge	https://www.moe.gov.sg/media/files/primary/92bff26d -b2b4-4535-b868-b8415c744b91.pdf
Rate	Rate as amount per unit; rate/total/units; unitary method and compound units	W15-W16, W20, W29-W30, W33, W37-W40	Unit rate -> proportional table -> multi-step application	Rate calculation, unit tracking, comparison and word problems	Combined filling/emptying remains non-simultaneous and labelled extension	Complete + Advanced Bridge	https://www.moe.gov.sg/media/files/primary/92bff26d -b2b4-4535-b868-b8415c744b91.pdf
Area of Triangle	Base and perpendicular height; formula, missing dimensions and composite applications	W9-W10, W25, W30, W34, W37-W40	P4 rectangle/composite area -> P5 triangle area -> mixed figures	Identify base-height pairs, calculate, invert formula and combine areas	Partial-diagram challenges are labelled extension	Complete + Advanced Bridge	https://www.moe.gov.sg/media/files/primary/92bff26d -b2b4-4535-b868-b8415c744b91.pdf
Volume	Unit cubes; cubic units; isometric drawings; cube/cuboid volume; rectangular tanks and ml/L/cm³ relationships	W11-W12, W20, W33, W37-W40	Capacity foundations -> volume formula -> missing dimensions/liquid levels	Build, draw, calculate, convert and solve rectangular-tank applications	Rate-volume combinations are labelled extension	Complete + Advanced Bridge	https://www.moe.gov.sg/media/files/primary/92bff26d -b2b4-4535-b868-b8415c744b91.pdf
Angles, Triangles and Quadrilaterals	Angle facts; triangle properties; parallelogram, rhombus and trapezium properties	W21-W25, W30, W34, W37-W40	P4 angle/rectangle work -> P5 triangle and quadrilateral reasoning	Classify, apply angle sums/properties and state linked reasons	Exterior-angle and partial-diagram work is labelled extension	Complete + Advanced Bridge	https://www.moe.gov.sg/media/files/primary/92bff26d -b2b4-4535-b868-b8415c744b91.pdf
Data Representation	Retrieve tables, line graphs and simple pie charts; compare displays and investigate data	W26-W27, W30, W35, W38-W40	P4 graph construction -> P5 multi-representation interpretation	Totals, differences, claims, choice of display and limitations	Average is explicitly labelled P6 readiness, not ordinary P5 core	Complete + Advanced Bridge	https://www.moe.gov.sg/media/files/primary/92bff26d -b2b4-4535-b868-b8415c744b91.pdf
Algebra Readiness (Extension)	Symbols for unknowns, simple expressions, substitution and missing-value equations	W28, W30, W40	Arithmetic relationships -> symbolic representation -> P6 algebra	Translate, substitute and solve only simple supported forms	Not treated as ordinary P5 MOE core	Advanced Bridge	https://www.moe.gov.sg/media/files/primary/92bff26d -b2b4-4535-b868-b8415c744b91.pdf
Mathematical Processes	Representation, reasoning, communication, connections, applications, heuristics and checking	Embedded weekly; explicit W8, W10, W16, W20, W29-W40	Guided models -> upper-primary integration -> PSLE-format readiness	Models, equations, method choice, reasons, units and verification	Advanced tasks remain labelled and age-appropriate	Complete	https://www.moe.gov.sg/media/files/primary/92bff26d -b2b4-4535-b868-b8415c744b91.pdf

Sources, Codes and Use Notes

The MOE syllabus defines the required scope; PSLE Checkpoint sequencing and advanced extensions are curriculum-design decisions.

Type	Source / Code	Details	Use in this List	Authority	Notes
Official syllabus	MOE Primary Mathematics Syllabus (P1-P6), updated Oct 2025	https://www.moe.gov.sg/media/files/primary/92bff26db2b4-4535-b868-b8415c744b91.pdf	Primary alignment and level boundaries	Ministry of Education, Singapore	Current official reference used for this version.
Curriculum baseline	Primary Mathematics P1-P6 Master Knowledge Coverage Matrix V3 with V4 refinement audit	Source workbook plus the cross-grade MOE boundary audit	Weekly sequence, corrected level boundaries, spiral structure and advanced labels	PSLE Checkpoint	P5 V4 retains the V3 architecture while applying the verified corrections.
Code	NA-WN / NA-AS / NA-MD / NA-FR / NA-ALG	Whole numbers; addition/subtraction; multiplication/division; fractions; early algebra	Atomic KP family classification	Matrix rule	Content strands.
Code	MG-MEAS / MG-GEO / ST-DATA	Measurement; geometry; statistics/data	Atomic KP family classification	Matrix rule	Content strands.
Code	PS-MODEL / PS-HEUR / PS-REASON / PS-CHECK / PS-COMM	Models; heuristics; reasoning; checking; communication	Mathematical process classification	Matrix rule	Processes are embedded across content.
Use rule	One KP, one assessment target	Each KP should be assessed independently or clearly tagged within a mixed paper.	Assessment design	PSLE Checkpoint	Do not substitute a different skill for the stated KP.
Use rule	Review weeks	Review only taught content, but increase integration, reasoning and transfer.	Assessment design	PSLE Checkpoint	Review is not a source of untaught concepts.