DAS EXAMINATIONS

MATHEMATICS
YEARLY SCHEMES OF WORK

NORMAL MODEL: 3 TERMS × 12 WEEKS
HYBRID MODEL: 2 TERMS × 12 WEEKS

BASIC 7 • BASIC 8 • BASIC 9

Aligned to the NaCCA Common Core Programme (CCP)
Mathematics Curriculum • September 2020

Document guide

This scheme converts the uploaded NaCCA Mathematics curriculum into two usable annual calendars for each JHS level. The Normal model provides 36 teaching weeks; the Hybrid model compresses the same ordered curriculum into 24 intensive weeks. Schools may insert dates, local resources and teacher remarks after printing.

Field	Use
Indicator(s)	Official curriculum references retained for planning and supervision.
Learning focus/outcome	The knowledge, skill or application learners should demonstrate by the end of the week.
Suggested learning experiences	Learner-centred, inquiry-based and contextual activities consistent with the CCP philosophy.
Assessment	Diagnostic, formative, collaborative and application-based evidence for SBA records.
Core competencies	CP: Critical Thinking & Problem Solving; CC: Communication & Collaboration; CI: Creativity & Innovation; DL: Digital Literacy.

Recommended weekly structure

Begin with a short prior-knowledge check; develop concepts through concrete or visual models; move to guided and independent practice; finish with an authentic problem and exit ticket. Provide support tasks and extension tasks so that mixed-ability learners can participate successfully.

Basic 7 (JHS 1) • NORMAL YEARLY SCHEME

Three terms • 12 weeks per term • 36 instructional weeks

1	**1**	**Number**	Numeration	B7.1.1.1.1	• Model, read and write whole numbers beyond one billion; apply place value in money and population contexts.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**2**	**Number**	Numeration	B7.1.1.1.2	• Compare and order large whole numbers using place-value reasoning and number lines.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**3**	**Number**	Numeration	B7.1.1.1.3	• Round whole numbers up, down and off to required place values in practical estimates.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**4**	**Number**	Numeration	B7.1.1.1.4-5	• Round decimals; express numbers to stated decimal places and significant figures.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**5**	**Number**	Operations	B7.1.2.1.1-3	• Use mental strategies; multiply and divide by powers of ten; solve contextual number problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**6**	**Number**	Operations	B7.1.2.2	• Perform the four operations on whole numbers and decimals; estimate and verify answers.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**7**	**Number**	Operations	B7.1.2.3.1-2	• Interpret repeated factors and write numbers in index form; evaluate simple powers.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**8**	**Number**	Operations	B7.1.2.3.3-5	• Apply zero index, prime factors, HCF and LCM to real-life problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**9**	**Number**	Fractions, decimals & percentages	B7.1.3.1.1	• Recall and determine equivalent common fractions, decimals and percentages.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**10**	**Number**	Fractions, decimals & percentages	B7.1.3.1.2	• Compare, order and estimate fractions, decimals and percentages.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**11**	**Number**	Fractions, decimals & percentages	B7.1.3.2.1-2	• Add and subtract fractions and solve multi-step contextual problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**12**	**Number**	Fractions, decimals & percentages	B7.1.3.3.1-4	• Multiply and divide fractions; find a fraction of money or quantity.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**1**	**Number**	Ratio & proportion	B7.1.4.1.1-2	• Use ratio language, write ratios and simplify ratios in everyday situations.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI

2	**2**	**Number**	Ratio & proportion	B7.1.4.1.3-4	• Build equivalent-ratio tables and use proportional reasoning to find missing values.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**3**	**Algebra**	Patterns & relations	B7.2.1.1.1	• Extend visual and numerical relations, with and without symbols.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**4**	**Algebra**	Patterns & relations	B7.2.1.1.2-3	• Describe and identify rules in patterns, mappings and input-output tables.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**5**	**Algebra**	Patterns & relations	B7.2.1.1.4	• Plot ordered pairs, prepare tables of values and draw graphs of relations.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**6**	**Algebra**	Expressions	B7.2.2.1.1	• Translate simple situations into algebraic expressions; identify terms and coefficients.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**7**	**Algebra**	Expressions	B7.2.2.1.2-3	• Add, subtract, multiply and divide simple algebraic expressions.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**8**	**Algebra**	Expressions	B7.2.2.1.4	• Substitute values and evaluate expressions, including perimeter and area formulae.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**9**	**Algebra**	Variables & equations	B7.2.3.1.1	• Translate word problems into linear equations in one variable.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**10**	**Algebra**	Variables & equations	B7.2.3.1.2	• Model and solve linear equations using balances, shapes and algebraic methods.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**11**	**Geometry & Measurement**	Shape & space	B7.3.1.1.1-3	• Measure and classify angles; solve complementary, supplementary, adjacent and vertically opposite angles.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**12**	**Geometry & Measurement**	Shape & space	B7.3.1.2.1-3	• Construct perpendiculars, perpendicular bisectors and angle bisectors accurately.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**1**	**Geometry & Measurement**	Shape & space	B7.3.1.2.4-7	• Construct 15, 30, 45, 60, 75 and 90 degree angles; identify constructions in the environment.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**2**	**Geometry & Measurement**	Measurement	B7.3.2.1.1-2	• Find perimeter in mixed units; derive and apply circumference using pi.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**3**	**Geometry & Measurement**	Measurement	B7.3.2.1.3; B7.3.2.2.1-2	• Draw shapes on grids; derive and apply the area formula for triangles.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**4**	**Geometry & Measurement**	Measurement	B7.3.2.3.1-2	• Read three-figure bearings and determine back bearings.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL

3	**5**	**Geometry & Measurement**	Measurement	B7.3.2.3.3-5	• Distinguish scalars and vectors; convert between component and magnitude-bearing forms.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**6**	**Geometry & Measurement**	Transformation	B7.3.3.1.1-2	• Identify line symmetry; reflect points and plane figures on coordinate grids.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**7**	**Geometry & Measurement**	Transformation	B7.3.3.1.3-4	• Translate points and shapes; investigate congruent and similar images.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**8**	**Handling Data**	Data	B7.4.1.1.1-2	• Select data-collection methods; design and administer a simple questionnaire.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
3	**9**	**Handling Data**	Data	B7.4.1.1.3	• Organise survey data in frequency tables; construct and interpret graphs/charts.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
3	**10**	**Handling Data**	Data	B7.4.1.2.1-2	• Calculate and interpret mean and median of ungrouped data.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
3	**11**	**Handling Data**	Probability	B7.4.2.1.1-2	• Describe and classify likelihood using the probability scale.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
3	**12**	**Handling Data**	Probability	B7.4.2.1.3	• Calculate probabilities of single events; conduct, record and compare experiments.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL

Basic 7 (JHS 1) • HYBRID YEARLY SCHEME

Two accelerated terms • 12 weeks per term • 24 instructional weeks • all indicators retained in curriculum order

Term	Week	Strand	Sub-strand	Indicator(s)	Learning focus / expected outcome	Suggested learning experiences	Resources	Assessment	Core competencies
1	1	**Number**	Numeration	B7.1.1.1.1; B7.1.1.1.2	• Model, read and write whole numbers beyond one billion; apply place value in money and population contexts. • Compare and order large whole numbers using place-value reasoning and number lines.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	2	**Number**	Numeration	B7.1.1.1.3	• Round whole numbers up, down and off to required place values in practical estimates.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	3	**Number**	Numeration / Operations	B7.1.1.1.4-5; B7.1.2.1.1-3	• Round decimals; express numbers to stated decimal places and significant figures. • Use mental strategies; multiply and divide by powers of ten; solve contextual number problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	4	**Number**	Operations	B7.1.2.2	• Perform the four operations on whole numbers and decimals; estimate and verify answers.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	5	**Number**	Operations	B7.1.2.3.1-2; B7.1.2.3.3-5	• Interpret repeated factors and write numbers in index form; evaluate simple powers. • Apply zero index, prime factors, HCF and LCM to real-life problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	6	**Number**	Fractions, decimals & percentages	B7.1.3.1.1	• Recall and determine equivalent common fractions, decimals and percentages.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	7	**Number**	Fractions, decimals & percentages	B7.1.3.1.2; B7.1.3.2.1-2	• Compare, order and estimate fractions, decimals and percentages. • Add and subtract fractions and solve multi-step contextual problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	8	**Number**	Fractions, decimals & percentages	B7.1.3.3.1-4	• Multiply and divide fractions; find a fraction of money or quantity.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	9	**Number**	Ratio & proportion	B7.1.4.1.1-2; B7.1.4.1.3-4	• Use ratio language, write ratios and simplify ratios in everyday situations. • Build equivalent-ratio tables and use proportional reasoning to find missing values.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	10	**Algebra**	Patterns & relations	B7.2.1.1.1	• Extend visual and numerical relations, with and without symbols.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	11	**Algebra**	Patterns & relations	B7.2.1.1.2-3; B7.2.1.1.4	• Describe and identify rules in patterns, mappings and input-output tables. • Plot ordered pairs, prepare tables of values and draw graphs of relations.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	12	**Algebra**	Expressions	B7.2.2.1.1	• Translate simple situations into algebraic expressions; identify terms and coefficients.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	1	**Algebra**	Expressions	B7.2.2.1.2-3; B7.2.2.1.4	• Add, subtract, multiply and divide simple algebraic expressions. • Substitute values and evaluate expressions, including perimeter and area formulae.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI

Term	Week	Strand	Sub-strand	Indicator(s)	Learning focus / expected outcome	Suggested learning experiences	Resources	Assessment	Core competencies
2	**2**	**Algebra**	Variables & equations	B7.2.3.1.1	• Translate word problems into linear equations in one variable.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**3**	**Algebra / Geometry & Measurement**	Variables & equations / Shape & space	B7.2.3.1.2; B7.3.1.1.1-3	• Model and solve linear equations using balances, shapes and algebraic methods. • Measure and classify angles; solve complementary, supplementary, adjacent and vertically opposite angles.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**4**	**Geometry & Measurement**	Shape & space	B7.3.1.2.1-3	• Construct perpendiculars, perpendicular bisectors and angle bisectors accurately.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**5**	**Geometry & Measurement**	Shape & space / Measurement	B7.3.1.2.4-7; B7.3.2.1.1-2	• Construct 15, 30, 45, 60, 75 and 90 degree angles; identify constructions in the environment. • Find perimeter in mixed units; derive and apply circumference using pi.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**6**	**Geometry & Measurement**	Measurement	B7.3.2.1.3; B7.3.2.2.1-2	• Draw shapes on grids; derive and apply the area formula for triangles.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**7**	**Geometry & Measurement**	Measurement	B7.3.2.3.1-2; B7.3.2.3.3-5	• Read three-figure bearings and determine back bearings. • Distinguish scalars and vectors; convert between component and magnitude-bearing forms.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**8**	**Geometry & Measurement**	Transformation	B7.3.3.1.1-2	• Identify line symmetry; reflect points and plane figures on coordinate grids.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**9**	**Geometry & Measurement / Handling Data**	Transformation / Data	B7.3.3.1.3-4; B7.4.1.1.1-2	• Translate points and shapes; investigate congruent and similar images. • Select data-collection methods; design and administer a simple questionnaire.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**10**	**Handling Data**	Data	B7.4.1.1.3	• Organise survey data in frequency tables; construct and interpret graphs/charts.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
2	**11**	**Handling Data**	Data / Probability	B7.4.1.2.1-2; B7.4.2.1.1-2	• Calculate and interpret mean and median of ungrouped data. • Describe and classify likelihood using the probability scale.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
2	**12**	**Handling Data**	Probability	B7.4.2.1.3	• Calculate probabilities of single events; conduct, record and compare experiments.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL

Basic 8 (JHS 2) • NORMAL YEARLY SCHEME

Three terms • 12 weeks per term • 36 instructional weeks

1	**1**	**Number**	Numeration	B8.1.1.1.1-3	• Read, write, compare and round integers and decimals using place value.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**2**	**Number**	Numeration	B8.1.1.1.4	• Express integers in standard form and convert standard form to ordinary notation.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**3**	**Number**	Numeration	B8.1.1.2.1	• Identify perfect squares and square roots using sets, patterns and factorisation.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**4**	**Number**	Numeration	B8.1.1.2.2	• Use sets of factors to determine HCF and LCM and solve contextual problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**5**	**Number**	Operations	B8.1.2.1.1	• Multiply and divide whole numbers and decimals by powers of ten mentally.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**6**	**Number**	Operations	B8.1.2.2.1-2	• Add/subtract large numbers; multiply/divide multi-digit numbers using efficient methods.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**7**	**Number**	Operations	B8.1.2.2.3	• Solve four-operation decimal problems from stories, bills and tables.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**8**	**Number**	Operations	B8.1.2.3.1-2	• State and apply the laws of indices to simplify numerical expressions.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**9**	**Number**	Operations	B8.1.2.3.3	• Solve simple exponential equations and verify solutions.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**10**	**Number**	Fractions, decimals & percentages	B8.1.3.1.1	• Review fraction concepts and solve basic-operation problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**11**	**Number**	Fractions, decimals & percentages	B8.1.3.1.2	• Perform combined operations on fractions, decimals and percentages.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**12**	**Number**	Fractions, decimals & percentages	B8.1.3.1	• Apply percentages to scores, discounts, increases and decreases.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**1**	**Number**	Ratio & proportion	B8.1.4.1.1-2	• Use ratio reasoning to convert units and solve rates, speed and distance problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI

2	**2**	**Number**	Ratio & proportion	B8.1.4.1.3	• Draw and interpret travel graphs.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**3**	**Number**	Ratio & proportion	B8.1.4.1.4-5	• Represent direct proportion in tables, graphs and equations; find the constant of proportionality.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**4**	**Algebra**	Patterns & relations	B8.2.1.1.1	• Calculate gradient and write the equation of a straight line.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**5**	**Algebra**	Patterns & relations	B8.2.1.1.2	• Use linear graphs to interpolate, extrapolate and solve practical problems.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**6**	**Algebra**	Expressions	B8.2.2.1.1-2	• Expand brackets using the distributive law and simplify expressions.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**7**	**Algebra**	Expressions	B8.2.2.1.3-4	• Factorise algebraic expressions and apply factorisation in problem solving.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**8**	**Algebra**	Variables & equations	B8.2.3.1.1-2	• Translate word problems into linear inequalities; solve inequalities.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**9**	**Algebra**	Variables & equations	B8.2.3.1.3	• Represent solution sets of linear inequalities on number lines.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**10**	**Geometry & Measurement**	Shape & space	B8.3.1.1.1-2	• Use alternate, corresponding and triangle angle properties to find unknown angles.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**11**	**Geometry & Measurement**	Shape & space	B8.3.1.2.1	• Construct and bisect 105, 120, 135 and 150 degree angles.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**12**	**Geometry & Measurement**	Shape & space	B8.3.1.2.2	• Construct scalene, isosceles, equilateral and right-angled triangles.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**1**	**Geometry & Measurement**	Shape & space	B8.3.1.2.3	• Construct and apply loci, circle centres, regular hexagons and parallel loci.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**2**	**Geometry & Measurement**	Measurement	B8.3.2.1.1-2	• Derive and apply the area and sector properties of circles.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**3**	**Geometry & Measurement**	Measurement	B8.3.2.1.3-4	• Apply Pythagoras' theorem to real-life distance and area problems.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**4**	**Geometry & Measurement**	Measurement	B8.3.2.1.5	• Use sine, cosine and tangent in right-angled triangles.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL

3	**5**	**Geometry & Measurement**	Measurement	B8.3.2.1.5	• Solve angles of elevation and depression problems.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**6**	**Geometry & Measurement**	Vectors	B8.3.2.2.1-2	• Add, subtract and multiply component vectors; apply vector equality.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**7**	**Geometry & Measurement**	Transformation	B8.3.3.1.1-2	• Describe and perform rotations on the coordinate plane.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**8**	**Handling Data**	Data	B8.4.1.1.1-2	• Classify data and justify appropriate data-collection methods.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
3	**9**	**Handling Data**	Data	B8.4.1.1.3	• Construct frequency tables, pie charts and stem-and-leaf plots.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
3	**10**	**Handling Data**	Data	B8.4.1.2.1-2	• Calculate mean, median and mode and justify the most suitable average.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
3	**11**	**Handling Data**	Probability	B8.4.2.1.1	• Perform experiments involving two independent events and list sample spaces.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
3	**12**	**Handling Data**	Probability	B8.4.2.1.2	• Calculate and express probabilities of independent events in several forms.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL

Basic 8 (JHS 2) • HYBRID YEARLY SCHEME

Two accelerated terms • 12 weeks per term • 24 instructional weeks • all indicators retained in curriculum order

Term	Week	Strand	Sub-strand	Indicator(s)	Learning focus / expected outcome	Suggested learning experiences	Resources	Assessment	Core competencies
1	1	**Number**	Numeration	B8.1.1.1.1-3; B8.1.1.1.4	• Read, write, compare and round integers and decimals using place value. • Express integers in standard form and convert standard form to ordinary notation.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	2	**Number**	Numeration	B8.1.1.2.1	• Identify perfect squares and square roots using sets, patterns and factorisation.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	3	**Number**	Numeration / Operations	B8.1.1.2.2; B8.1.2.1.1	• Use sets of factors to determine HCF and LCM and solve contextual problems. • Multiply and divide whole numbers and decimals by powers of ten mentally.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	4	**Number**	Operations	B8.1.2.2.1-2	• Add/subtract large numbers; multiply/divide multi-digit numbers using efficient methods.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	5	**Number**	Operations	B8.1.2.2.3; B8.1.2.3.1-2	• Solve four-operation decimal problems from stories, bills and tables. • State and apply the laws of indices to simplify numerical expressions.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	6	**Number**	Operations	B8.1.2.3.3	• Solve simple exponential equations and verify solutions.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	7	**Number**	Fractions, decimals & percentages	B8.1.3.1.1; B8.1.3.1.2	• Review fraction concepts and solve basic-operation problems. • Perform combined operations on fractions, decimals and percentages.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	8	**Number**	Fractions, decimals & percentages	B8.1.3.1	• Apply percentages to scores, discounts, increases and decreases.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	9	**Number**	Ratio & proportion	B8.1.4.1.1-2; B8.1.4.1.3	• Use ratio reasoning to convert units and solve rates, speed and distance problems. • Draw and interpret travel graphs.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	10	**Number**	Ratio & proportion	B8.1.4.1.4-5	• Represent direct proportion in tables, graphs and equations; find the constant of proportionality.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	11	**Algebra**	Patterns & relations	B8.2.1.1.1; B8.2.1.1.2	• Calculate gradient and write the equation of a straight line. • Use linear graphs to interpolate, extrapolate and solve practical problems.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	12	**Algebra**	Expressions	B8.2.2.1.1-2	• Expand brackets using the distributive law and simplify expressions.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	1	**Algebra**	Expressions / Variables & equations	B8.2.2.1.3-4; B8.2.3.1.1-2	• Factorise algebraic expressions and apply factorisation in problem solving. • Translate word problems into linear inequalities; solve inequalities.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI

Term	Week	Strand	Sub-strand	Indicator(s)	Learning focus / expected outcome	Suggested learning experiences	Resources	Assessment	Core competencies
2	**2**	**Algebra**	Variables & equations	B8.2.3.1.3	• Represent solution sets of linear inequalities on number lines.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**3**	**Geometry & Measurement**	Shape & space	B8.3.1.1.1-2; B8.3.1.2.1	• Use alternate, corresponding and triangle angle properties to find unknown angles. • Construct and bisect 105, 120, 135 and 150 degree angles.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**4**	**Geometry & Measurement**	Shape & space	B8.3.1.2.2	• Construct scalene, isosceles, equilateral and right-angled triangles.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**5**	**Geometry & Measurement**	Shape & space / Measurement	B8.3.1.2.3; B8.3.2.1.1-2	• Construct and apply loci, circle centres, regular hexagons and parallel loci. • Derive and apply the area and sector properties of circles.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**6**	**Geometry & Measurement**	Measurement	B8.3.2.1.3-4	• Apply Pythagoras' theorem to real-life distance and area problems.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**7**	**Geometry & Measurement**	Measurement	B8.3.2.1.5; B8.3.2.1.5	• Use sine, cosine and tangent in right-angled triangles. • Solve angles of elevation and depression problems.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**8**	**Geometry & Measurement**	Vectors	B8.3.2.2.1-2	• Add, subtract and multiply component vectors; apply vector equality.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**9**	**Geometry & Measurement / Handling Data**	Transformation / Data	B8.3.3.1.1-2; B8.4.1.1.1-2	• Describe and perform rotations on the coordinate plane. • Classify data and justify appropriate data-collection methods.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**10**	**Handling Data**	Data	B8.4.1.1.3	• Construct frequency tables, pie charts and stem-and-leaf plots.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
2	**11**	**Handling Data**	Data / Probability	B8.4.1.2.1-2; B8.4.2.1.1	• Calculate mean, median and mode and justify the most suitable average. • Perform experiments involving two independent events and list sample spaces.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
2	**12**	**Handling Data**	Probability	B8.4.2.1.2	• Calculate and express probabilities of independent events in several forms.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL

Basic 9 (JHS 3) • NORMAL YEARLY SCHEME

Three terms • 12 weeks per term • 36 instructional weeks

1	**1**	**Number**	Numeration	B9.1.1.1.1	• Express integers and decimals to specified significant figures and decimal places.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**2**	**Number**	Numeration	B9.1.1.1	• Apply approximation and estimation to practical measurements and calculations.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**3**	**Number**	Sets	B9.1.1.2.1	• Represent relationships among sets with Venn diagrams; solve union/intersection problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**4**	**Number**	Sets	B9.1.1.2	• Apply set language and Venn diagrams to two- and three-set contextual problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**5**	**Number**	Operations	B9.1.2.1-2	• Apply efficient mental and written strategies to real-number operations.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**6**	**Number**	Operations	B9.1.2.3	• Apply laws of indices and solve exponential expressions/equations.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**7**	**Number**	Surds	B9.1.2.4.1	• Identify simple and compound surds; simplify elementary surd expressions.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**8**	**Number**	Surds	B9.1.2.4	• Approximate square roots of non-perfect squares and solve surd problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**9**	**Number**	Fractions, decimals & percentages	B9.1.3.1.1-2	• Review and apply combined operations on fractions, decimals and percentages.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**10**	**Number**	Fractions, decimals & percentages	B9.1.3.1.3	• Solve multi-step word problems involving fractions and percentages.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**11**	**Number**	Ratio & proportion	B9.1.4.1.1	• Represent proportional relationships by equations and solve direct/indirect variation problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	**12**	**Number**	Ratio & proportion	B9.1.4.1	• Solve percentage profit, loss, discount, commission, depreciation and appreciation problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**1**	**Number**	Ratio & proportion	B9.1.4.1	• Calculate simple/compound interest, hire purchase, tax and SSNIT contributions.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI

2	**2**	**Algebra**	Patterns & relations	B9.2.1.1.1	• Construct tables and graphs for two linear relations.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**3**	**Algebra**	Patterns & relations	B9.2.1.1.2	• Use simultaneous linear graphs to determine missing values and intersections.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**4**	**Algebra**	Patterns & relations	B9.2.1.1.3	• Solve simultaneous linear equations graphically and interpret solutions.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**5**	**Algebra**	Expressions	B9.2.2.1.1	• Change the subject of formulae and solve practical formula problems.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**6**	**Algebra**	Expressions	B9.2.2.1.2	• Substitute values into formulae and evaluate accurately.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**7**	**Algebra**	Expressions	B9.2.2.1.3	• Factorise expressions containing simple binomials.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**8**	**Algebra**	Expressions	B9.2.2.1.4	• Use simplification and factorisation to solve algebraic and geometric problems.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**9**	**Algebra**	Variables & equations	B9.2.3.1.1	• Solve linear inequalities with rational coefficients.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**10**	**Algebra**	Variables & equations	B9.2.3.1.2	• Graph inequalities on number lines and Cartesian planes.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**11**	**Algebra**	Variables & equations	B9.2.3.1.3	• Solve real-life problems involving equations and inequalities.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**12**	**Geometry & Measurement**	Shape & space	B9.3.1.1.1	• Derive and apply the sum of interior angles of polygons.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**1**	**Geometry & Measurement**	Shape & space	B9.3.1.1.2	• Identify and apply properties of similar and congruent triangles.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**2**	**Geometry & Measurement**	Construction	B9.3.1.2.1	• Construct inscribed/circumscribed circles and triangles under given conditions.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**3**	**Geometry & Measurement**	Construction	B9.3.1.2	• Construct parallelograms, rectangles, squares and compound plane shapes.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**4**	**Geometry & Measurement**	Measurement	B9.3.2.1.1-3	• Draw nets and determine surface areas of cuboids and triangular prisms.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL

3	**5**	**Geometry & Measurement**	Vectors	B9.3.2.1.4; B9.3.2.2.1	• Express position vectors; investigate parallel and perpendicular vectors.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**6**	**Geometry & Measurement**	Vectors	B9.3.2.2.2	• Apply triangle and parallelogram laws to resolve vectors.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**7**	**Geometry & Measurement**	Transformation	B9.3.3.1.1-3	• Perform enlargements; determine scale factors; verify similarity and congruence.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
3	**8**	**Handling Data**	Data	B9.4.1.1.1-2	• Collect grouped/ungrouped data; construct and interpret frequency tables and graphs.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
3	**9**	**Handling Data**	Data	B9.4.1.1.3	• Construct and interpret histograms; estimate the modal class.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
3	**10**	**Handling Data**	Data	B9.4.1.2.1-2	• Choose samples; analyse grouped data using measures of central tendency.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
3	**11**	**Handling Data**	Data	B9.4.1.2.3	• Investigate effects of changing data values on mean, median and mode.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
3	**12**	**Handling Data**	Probability	B9.4.2.1.1	• Perform dependent-event experiments; use sample spaces and probability trees.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL

Basic 9 (JHS 3) • HYBRID YEARLY SCHEME

Two accelerated terms • 12 weeks per term • 24 instructional weeks • all indicators retained in curriculum order

Term	Week	Strand	Sub-strand	Indicator(s)	Learning focus / expected outcome	Suggested learning experiences	Resources	Assessment	Core competencies
1	1	**Number**	Numeration	B9.1.1.1.1; B9.1.1.1	• Express integers and decimals to specified significant figures and decimal places. • Apply approximation and estimation to practical measurements and calculations.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	2	**Number**	Sets	B9.1.1.2.1	• Represent relationships among sets with Venn diagrams; solve union/intersection problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	3	**Number**	Sets / Operations	B9.1.1.2; B9.1.2.1-2	• Apply set language and Venn diagrams to two- and three-set contextual problems. • Apply efficient mental and written strategies to real-number operations.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	4	**Number**	Operations	B9.1.2.3	• Apply laws of indices and solve exponential expressions/equations.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	5	**Number**	Surds	B9.1.2.4.1; B9.1.2.4	• Identify simple and compound surds; simplify elementary surd expressions. • Approximate square roots of non-perfect squares and solve surd problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	6	**Number**	Fractions, decimals & percentages	B9.1.3.1.1-2	• Review and apply combined operations on fractions, decimals and percentages.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	7	**Number**	Fractions, decimals & percentages / Ratio & proportion	B9.1.3.1.3; B9.1.4.1.1	• Solve multi-step word problems involving fractions and percentages. • Represent proportional relationships by equations and solve direct/indirect variation problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	8	**Number**	Ratio & proportion	B9.1.4.1	• Solve percentage profit, loss, discount, commission, depreciation and appreciation problems.	Use number cards, place-value charts or real-life records; learners model, estimate, calculate, explain strategies and check solutions in pairs.	Number cards/chart, counters, calculator, price lists and local records.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	9	**Number / Algebra**	Ratio & proportion / Patterns & relations	B9.1.4.1; B9.2.1.1.1	• Calculate simple/compound interest, hire purchase, tax and SSNIT contributions. • Construct tables and graphs for two linear relations.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	10	**Algebra**	Patterns & relations	B9.2.1.1.2	• Use simultaneous linear graphs to determine missing values and intersections.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	11	**Algebra**	Patterns & relations / Expressions	B9.2.1.1.3; B9.2.2.1.1	• Solve simultaneous linear equations graphically and interpret solutions. • Change the subject of formulae and solve practical formula problems.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
1	12	**Algebra**	Expressions	B9.2.2.1.2	• Substitute values into formulae and evaluate accurately.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	1	**Algebra**	Expressions	B9.2.2.1.3; B9.2.2.1.4	• Factorise expressions containing simple binomials. • Use simplification and factorisation to solve algebraic and geometric problems.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI

Term	Week	Strand	Sub-strand	Indicator(s)	Learning focus / expected outcome	Suggested learning experiences	Resources	Assessment	Core competencies
2	**2**	**Algebra**	Variables & equations	B9.2.3.1.1	• Solve linear inequalities with rational coefficients.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**3**	**Algebra**	Variables & equations	B9.2.3.1.2; B9.2.3.1.3	• Graph inequalities on number lines and Cartesian planes. • Solve real-life problems involving equations and inequalities.	Use tables, cards, balance models or graph paper; learners generalise patterns, justify steps and solve a contextual problem collaboratively.	Algebra tiles/cards, balance model, graph paper, calculator.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI
2	**4**	**Geometry & Measurement**	Shape & space	B9.3.1.1.1	• Derive and apply the sum of interior angles of polygons.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**5**	**Geometry & Measurement**	Shape & space / Construction	B9.3.1.1.2; B9.3.1.2.1	• Identify and apply properties of similar and congruent triangles. • Construct inscribed/circumscribed circles and triangles under given conditions.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**6**	**Geometry & Measurement**	Construction	B9.3.1.2	• Construct parallelograms, rectangles, squares and compound plane shapes.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**7**	**Geometry & Measurement**	Measurement / Vectors	B9.3.2.1.1-3; B9.3.2.1.4; B9.3.2.2.1	• Draw nets and determine surface areas of cuboids and triangular prisms. • Express position vectors; investigate parallel and perpendicular vectors.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**8**	**Geometry & Measurement**	Vectors	B9.3.2.2.2	• Apply triangle and parallelogram laws to resolve vectors.	Teacher models with instruments/diagrams; learners measure, construct or plot, compare methods and solve an authentic design/navigation task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**9**	**Geometry & Measurement / Handling Data**	Transformation / Data	B9.3.3.1.1-3; B9.4.1.1.1-2	• Perform enlargements; determine scale factors; verify similarity and congruence. • Collect grouped/ungrouped data; construct and interpret frequency tables and graphs.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Math set, graph paper, grid/chart, ruler, compass; optional GeoGebra.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, CI, DL
2	**10**	**Handling Data**	Data	B9.4.1.1.3	• Construct and interpret histograms; estimate the modal class.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
2	**11**	**Handling Data**	Data	B9.4.1.2.1-2; B9.4.1.2.3	• Choose samples; analyse grouped data using measures of central tendency. • Investigate effects of changing data values on mean, median and mode.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL
2	**12**	**Handling Data**	Probability	B9.4.2.1.1	• Perform dependent-event experiments; use sample spaces and probability trees.	Learners collect or simulate data, work in groups, organise results, explain patterns and solve a community-based task.	Survey sheet, dice/coins, graph paper, spreadsheet/chart tools.	Oral diagnostic; observed group task; 3-5 item exercise; exit ticket/application problem.	CP, CC, DL

IMPLEMENTATION AND MONITORING NOTES

- Complete the school, teacher, term dates and weekly date ranges on the printed copy.
- Use the listed indicators as the minimum entitlement; adapt contexts, examples and pacing to learner readiness without changing progression.
- Record evidence from exercises, investigations, projects, quizzes and end-of-term examinations in accordance with the school SBA policy.
- For the Hybrid model, provide pre-reading, guided practice sheets and catch-up clinics because some weeks combine two related curriculum units.
- Reserve part of Week 12 for consolidation, authentic performance tasks and assessment while completing the stated learning focus.
- Review assessment evidence weekly and reteach prerequisite skills before moving to concepts that depend on them.

Source

National Council for Curriculum and Assessment (NaCCA), Ministry of Education, Ghana. Mathematics Common Core Programme (CCP) Curriculum for JHS1 (B7)–JHS3 (B9), September 2020. Scheme prepared from the syllabus supplied by the user.