

2023

Annual Teaching Plans **MATHEMATICS**

Intermediate Phase



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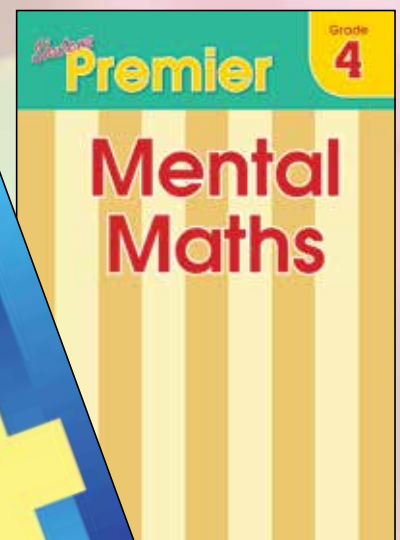
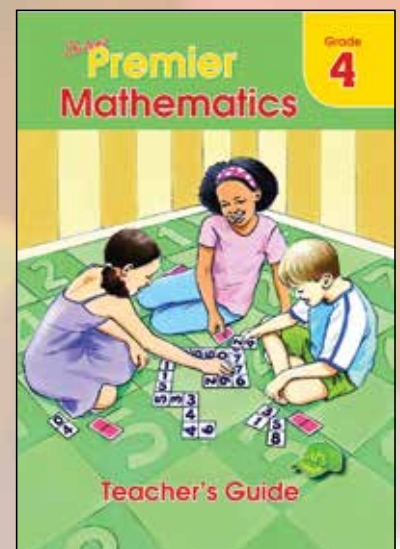
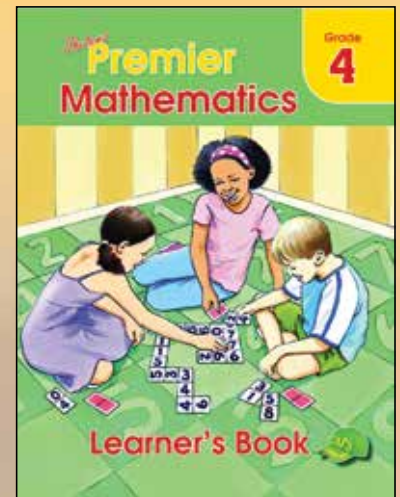
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Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 4		
			Unit	LB	TG
Whole numbers	Number range for counting, ordering, comparing and representing, and place value of digits - Count forwards and backwards (in 2s, 3s, 5s, 10s, 25s, 50s, 100s) between 0 and at least 10 000 - Order, compare and represent numbers to at least 4-digit numbers - Represent odd and even numbers to at least 1 000. - Recognize the place value of digits in whole numbers to at least 4-digit numbers - Round off to the nearest 10, 100 and 1 000.	Weeks 1–4	Unit 1.1: Whole numbers: Counting, ordering, comparing, representing and place value	1–2	4–5
Number sentences	- Write number sentences to describe problem situations - Solve and complete number sentences by - inspection - trial and improvement - Check solution by substitution Properties of whole numbers - Recognise and use the commutative; associative and distributive properties of operations with whole numbers. 0 in terms of its additive property Formal Assessment Task: Assignment	Weeks 5–6	Unit 1.2: Number sentences	3–5	6–7
Whole numbers	Number range for calculations - Addition and subtraction of whole of at least 4 digits Calculation techniques - Use a range of techniques to perform and check written and mental calculations with whole numbers including; - estimation - building up and breaking down numbers - rounding off and compensating - using a number line - using addition and subtraction as inverse operations.	Weeks 7–9	Unit 1.3: Whole numbers: Addition and subtraction (3-digit numbers)	6–12	8–12

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 4		
			Unit	LB	TG
Whole numbers	Properties of whole numbers - Recognize and use the commutative and associative properties of whole numbers 0 in terms of its additive property Solving problems - Solve problems in contexts involving whole numbers, including - financial contexts - measurement contexts	Weeks 7–9	Unit 1.3: Whole numbers: Addition and subtraction (3-digit numbers)	6–12	8–12
Revision		Week 10	Unit 1.10: Revision	46	39
	Formal Assessment Task: Test	Week 11			

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 4		
			Unit	LB	TG
Whole numbers	Number range for calculations: • Multiplication of one-digit numbers by numbers up to 10 • Multiply at least 2-digit by 1-digit • Multiplication of at least whole 2-digit by 2-digit numbers Calculation techniques • Use any two of the range of techniques to perform and check written and mental calculations of whole numbers including: • estimation • building up and breaking down • numbers • doubling and halving • using multiplication and division as inverse operations. Multiples and factors • Multiples of 1-digit numbers to at least 100 • Factors of 1-digit whole numbers to at least 10 • Factors of 2-digit whole numbers to at least 100 Properties of whole numbers Recognise and use the commutative; associative and distributive properties of whole numbers. Solving problems Solve problems in contexts involving whole numbers, including: • Financial contexts • Measurement contexts • Comparing two or more quantities of the same kind (ratio) • Comparing two quantities of different kinds (rate)	Weeks 1–4	Unit 1.5: Whole numbers: Multiplication and division (1-digit by 1-digit)	17–20	18–20
			Unit 1.9: Whole numbers: Multiplication and division (2-digit by 1-digit)	42–45	35–38
	Number range for calculations • Division of at least a 2-digit number by a 1-digit number • Division of at least whole 3-digit number by 1-digit numbers	Weeks 5–7	Unit 1.9: Whole numbers: Multiplication and division (2-digit by 1-digit)	42–45	35–38

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 4		
			Unit	LB	TG
Whole numbers	Calculation techniques - Use any two of the range of techniques to perform and check written and mental calculations of whole numbers including: - estimation - building up and breaking down numbers - using multiplication and division as inverse operations. Multiples and factors - Multiples of 1-digit numbers to at least 100. Properties of whole numbers - Recognise and use the distributive properties of whole numbers. Solving problems - Solve problems in contexts involving whole numbers, including: - financial contexts - measurement contexts - comparing two or more quantities of the same kind (ratio) - comparing two quantities of different kinds (rate). - grouping and equal sharing with remainders	Weeks 5–7	Unit 1.9: Whole numbers: Multiplication and division (2-digit by 1-digit)	42–45	35–38
	Numeric patterns	Investigate and extend patterns - Investigate and extend numeric patterns looking for relationships or rules of patterns - sequences involving a constant difference or ratio - of learner’s own creation - Describe observed relationships or rules for sequences involving constant difference or ratio in learner’s own words Input and output values Determine input values, output values and rules for patterns and relationships: - flow diagrams - tables	Weeks 8–9	Unit 1.4: Numeric patterns	13–16

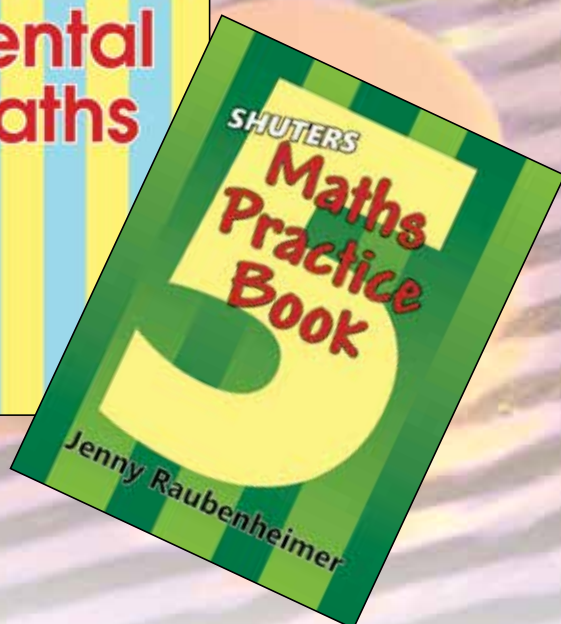
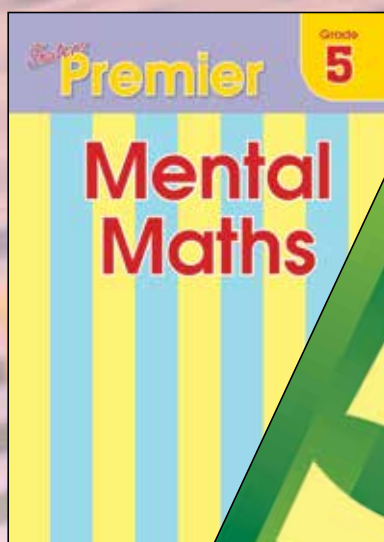
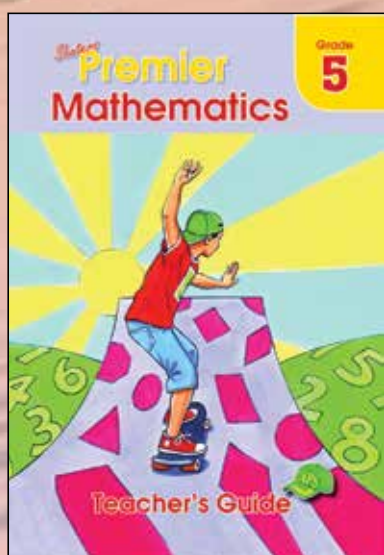
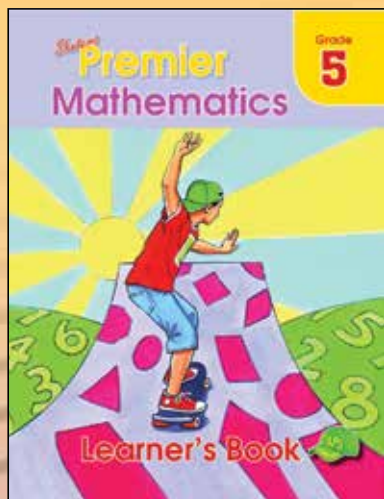
Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 4		
			Unit	LB	TG
Numeric patterns	Equivalent forms - Determine equivalence of different descriptions of the same relationship or rule presented: - verbally - in a flow diagram - in a table - by a number sentence	Weeks 8–9	Unit 1.4: Numeric patterns	13–16	13–17
Geometric patterns	Investigate and extend patterns - Investigate and extend geometric patterns looking for relationships or rules of patterns: - represented in physical or diagram form - sequences not limited to a constant difference or ratio of learner's own creation - Describe observed relationships or rules in learner's own words	Weeks 9–10	Unit 2.7: Geometric patterns	80–83	61–64
	Input and output values - Determine input values, output values and rules for the patterns and relationships using flow diagrams Equivalent forms - Determine equivalence of different descriptions of the same relationship or rule presented: - verbally - in a flow diagram - by a number sentence				
Revision		Week 10	Unit 1.10: Revision Unit 2.11: Revision	46 94	39 73
	Formal Assessment Task: Test	Week 11			

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 4		
			Unit	LB	TG
Common fractions	Describing and ordering fractions - Compare and order common fractions of different denominators (halves, thirds, quarters, fifths, sixths, sevenths, eighths) - Describe and compare common fractions in diagram form.	Weeks 1–4	Unit 2.3: Common fractions	56–61	46–50
	Calculations with fractions - Recognise, describe and use the equivalence of division and fractions - Addition of common fractions with same denominators.				
	Solving problems Solve problems in contexts involving fractions, including grouping and equal sharing.				
Time	Equivalent forms Recognise and use equivalent forms of common fractions (denominators which are multiples of each other)	Weeks 5–6	Unit 1.6: Time	21–26	21–24
	Reading time and time instruments - Read, tell and write time in 12-hour and 24-hour - formats on both analogue and digital instruments in: - hours - minutes - seconds - Instruments include clocks and watches				
	Reading calendars Calculations and problem solving time include: - problems in contexts involving time - calculation of the number of days between any two dates within the same or consecutive years - calculation of time intervals where time is given in minutes or hours only				

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 4		
			Unit	LB	TG
Length	Practical measuring - Estimate and practically measure 2D shapes and 3-D objects using measuring instruments such as: - rulers - metre sticks - tape measures - trundle wheels - Record, compare and order lengths of shapes and objects in millimetres (mm), centimetres (cm), metres (m), kilometres (km) Problem-solving - Solve problems in contexts involving length - Convert between - millimetres (mm) and centimetres (cm), - centimetres (cm) and metres (m) - metres (m) and kilometres (km) - Conversions limited to whole numbers and common fractions	Week 7	Unit 2.4: Length	62–68	51–54
Properties of 2D shapes	Range of shapes - Recognise, visualise and name 2-D shapes in the environment and geometric setting, focusing on regular and irregular polygons: - triangles, - squares, rectangles - other quadrilaterals, pentagons, hexagons, heptagons - Recognise, visualise and name 2-D shapes in the environment and geometric setting, focusing on circles Characteristics of shapes - Describe, sort and compare 2-D shapes in terms of: - straight and curved sides - number of sides Further activities - Draw 2-D shapes on grid paper	Weeks 8–9	Unit 1.8: Properties of 2D shapes	37–41	32–34
Revision		Week 10	Unit 1.10: Revision Unit 2.11: Revision Unit 4.13: Revision	46 94 192	39 73 138
	Formal Assessment Task: Test	Week 11			

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 4		
			Unit	LB	TG
Perimeter and area	Perimeter - Measure perimeter using rulers or measuring tapes Measurement of area - Find areas of regular and irregular shapes by counting squares on grids in order to develop an understanding of square units	Weeks 1–3	Unit 4.7: Perimeter, Area and Volume	173–178	125–128
Capacity/Volume	Practical Measuring - Estimate and practically measure 3-D objects using measuring instruments such as: - measuring spoons - measuring cups, - measuring jugs - Record, compare and order capacity and volume of 3D objects in millilitres (ml) and litres (l) Calculations and problem solving - Solve problems in contexts involving capacity/volume - Convert between millilitres and litres limited to examples with whole numbers and fractions	Weeks 3–4	Unit 3.1: Capacity/Volume Unit 4.7: Perimeter, Area and Volume	98–103 179	76–78 128
Number sentences	Use all four basic operations to solve problems in context - Write number sentences to describe problem situations Solving problems - Solve problems in contexts involving whole numbers and fractions, including: - financial contexts - measurement contexts - fractions, including grouping and equal sharing - comparing two or more quantities of the same kind (ratio) - comparing two quantities of different kinds (rate)	Weeks 5–6	Unit 3.10: Whole numbers: Multiplication (2-digit by 2-digit) Unit 3.11: Number sentences Unit 4.2: Whole numbers: Addition and subtraction (4-digit numbers) Unit 4.6: Whole numbers: Division (3-digit by 1-digit)	131–134 140–142 151–154 170–172	103–105 106–170 112–114 124
Revision		Weeks 7–8	Unit 3.13: Revision Unit 4.13: Revision	146 192	108 138
	Formal Assessment Task: Test	Weeks 9–10			

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Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 5		
			Unit	LB	TG
Whole numbers	Number range for counting, ordering, comparing and representing, and place value of digits - Order, compare and represent numbers to at least 6-digit numbers - Recognise the place value of digits in whole numbers to at least 6 digit numbers - Round off to the nearest 5, 10, 100 and 1 000	Weeks 1–4	Unit 1.1: Whole numbers: Counting, ordering, comparing, representing and place value (4-digit numbers)	1–2	4–5
Number sentences	- Write number sentences to describe problem situations - Solve and complete number sentences by: - inspection - trial and improvement - Check solution by substitution Formal Assessment Task: Assignment	Weeks 5–6	Unit 1.2: Number sentences	3–5	6
Whole numbers	Number range for calculations - Addition and subtraction of whole numbers with at least 5-digit numbers Calculation techniques - Using a range of techniques to perform and check written and mental calculations of whole numbers including: - estimation - adding and subtracting in columns - building up and breaking down numbers - using a number line - rounding off and compensating - using addition and subtraction as inverse operations Properties of whole numbers - Recognise and use the commutative and associative properties of whole numbers 0 in terms of its additive property Solving problems - Solve problems involving whole numbers, including the following: - financial contexts - measurement contexts	Weeks 7–9	Unit 1.3: Whole numbers: Addition and subtraction (5-digit numbers)	6–10	7–9
Revision	Formal Assessment Task: Test	Week 10	Unit 1.9: Revision	39–42	31–34
		Week 11			

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 5		
			Unit	LB	TG
Whole numbers	Multiplication • Multiplication of at least whole 3-digit by 2-digit numbers Calculation techniques • Using any two of the range of techniques to perform and check written and mental calculations of whole numbers including: • estimation – building up and breaking down numbers – doubling and halving – using multiplication and division as inverse operations Number range for multiples and factors • Multiples of 2-digits whole numbers to at least 100 • Factors of 2-digit whole numbers to at least 100 Properties of whole numbers • Recognise and use the commutative; associative and distributive properties with whole numbers • 1 in terms of its multiplicative property Solving problems • Solve problems involving whole numbers, including – financial contexts – measurement contexts – comparing two or more quantities of the same kind (ratio) – comparing two quantities of different kinds (rate)	Weeks 1–3	Unit 2.5: Whole numbers: Multiplication (3-digit by 2-digit)	60–66	47–50
	Division • Division of at least whole 3-digit by 2-digit numbers Calculation techniques • Use a range of techniques to perform and check written and mental calculations with whole numbers including – estimation	Weeks 4–6	Unit 2.9: Whole numbers: Division (4-digit by 2-digit numbers)	79–86	61–64

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 5		
			Unit	LB	TG
Whole numbers	– building up and breaking down numbers – using multiplication and division as inverse operations Properties of whole numbers • Recognise and use the distributive properties of whole numbers • 1 in terms of its multiplicative property Solving problems • Solve problems in contexts involving whole numbers, including – financial contexts – measurement contexts – comparing two or more quantities of the same kind (ratio) – comparing two quantities of different kinds (rate) – grouping and equal sharing with remainders	Weeks 4–6	Unit 2.9: Whole numbers: Division (4-digit by 2-digit numbers)	79–86	61–64
Numeric patterns	Investigate and extend patterns • Investigate and extend numeric patterns looking for relationships or rules of patterns – sequences not limited to constant difference or ratio – of learner's own creation • Describe observed relationships or rules for sequences involving constant difference or ratio in learner's own words Input and output values Determine input values, output values and rules for patterns and relationships: – flow diagrams – tables Equivalent forms • Determine equivalence of different descriptions of the same relationship or rule presented: – verbally – in a flow diagram – by a number sentence	Weeks 7–8	Unit 1.4: Numeric patterns	11–14	10–14

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 5		
			Unit	LB	TG
Geometric patterns	Investigate and extend patterns - Investigate and extend geometric patterns looking for relationships or rules of patterns: - represented in physical or diagram form - sequences not limited to a constant difference or ratio - of learner's own creation - Describe observed relationships or rules in learner's own words	Week 9	Unit 2.7: Geometric patterns	73–76	55–58
	Input and output values Determine input values, output values and rules for the patterns and relationships using flow diagrams				
	Equivalent forms - Determine equivalence of different descriptions of the same relationship or rule presented: - verbally - in a flow diagram - by a number sentence				
Revision	Revise Term 1 and Term 2 work	Week 10	Unit 1.9: Revision Unit 2.10: Revision	39–42 87–89	31–34 65–86
	Formal Assessment Task: Test	Week 11			

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 5		
			Unit	LB	TG
Common fractions	Describing and ordering fractions: - Count forwards and backwards in fractions - Compare and order common fractions to at least twelfths Calculations with fractions: - Addition and subtraction of common fractions with same denominator - Addition and subtraction of mixed numbers fractions of whole numbers - Fractions of whole which result in whole numbers - Recognise, describe and use the equivalence of division and fractions Solving problems - Solve problems in contexts involving common fractions, including grouping and sharing Equivalent forms: Recognise and use equivalent forms of common fractions with denominators which are multiples of each other	Weeks 1–4	Unit 3.1: Common fractions	90–94	68–70
Length	Practical measuring - Estimate and practically measure 2D shapes and 3-D objects using measuring instruments such as: - rulers - metre sticks - tape measures - trundle wheels - Record, compare and order lengths of shapes and objects in millimetres (mm), centimetres (cm), metres (m), kilometres (km) Calculations and problem-solving - Solve problems in contexts involving length - Convert between any of the following units. - millimetres (mm), - centimetres (cm), - metres (m) and - kilometres (km) - Conversions limited to whole numbers and common fractions	Week 5–6	Unit 2.4: Length	54–59	44–46

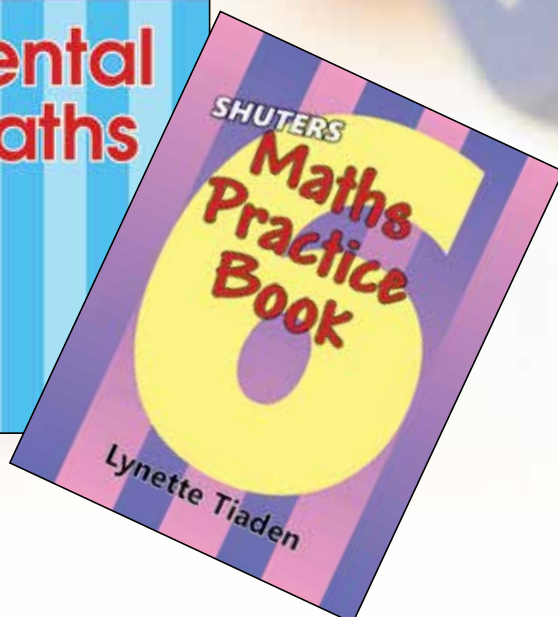
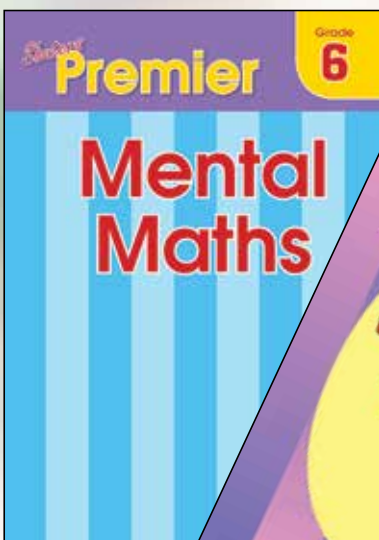
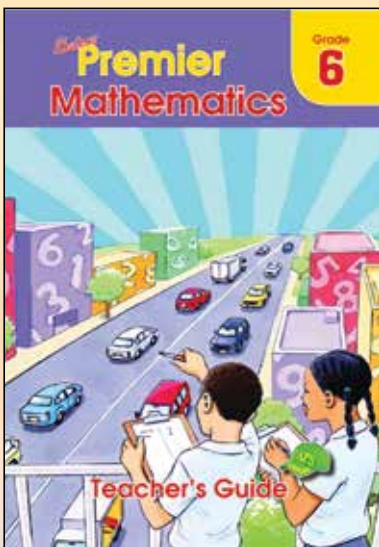
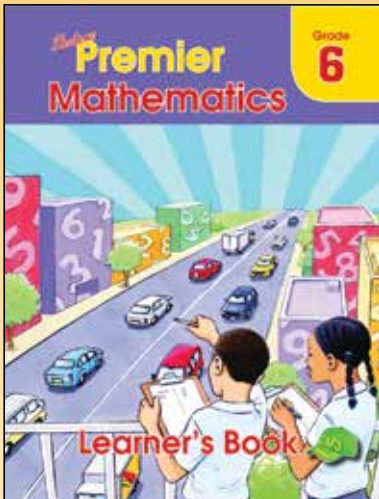
Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 5		
			Unit	LB	TG
Properties of 2D shapes	Range of shapes - Recognise, visualise and name 2-D shapes in the environment and geometric setting, focusing on - regular and irregular polygons - triangles, - squares, rectangles, other quadrilaterals, - pentagons, hexagons, heptagons - circles - similarities and differences between squares and rectangles Characteristics of shapes - Describe, sort and compare 2-D shapes in terms of: - straight and curved sides - number of sides - lengths of sides - angles in shapes, limited to: ✓ right angles ✓ angles smaller than right angles ✓ angles greater than right angles Further activities - Draw 2-D shapes on grid paper Angles - Recognise and describe angles in 2-D shapes: - right angles - angles smaller than right angles - angles greater than right angles	Weeks 6–7	Unit 3.6: Properties of 2D shapes	109–112	81–82
Properties of 3D objects	Range of objects - Recognise, visualise and name 3-D objects in the environment and geometric settings, focusing on: - rectangular prisms and other prisms - cubes - cylinders - cones - pyramids - Similarities and differences between cubes and rectangular prisms	Weeks 8–9	Unit 4.3: Properties of 3D objects	149–153	112–114

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 5		
			Unit	LB	TG
Properties of 3D objects	Characteristics of objects - Describe, sort and compare 3-D objects in terms of - shape of faces - number of faces - flat and curved surfaces Further activities - Make 3-D models using cut out polygons - Cut open boxes to trace and describe their nets	Weeks 8–9	Unit 4.3: Properties of 3D objects	149–153	112–114
Revision		Week 10	Unit 3.12: Revision	140–142	104–122
	Formal Assessment Task: Test	Week 11			

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 5		
			Unit	LB	TG
Perimeter, area and volume of 2D shapes	Perimeter Measure perimeter using rulers or measuring tapes	Weeks 1–3	Unit 4.6: Perimeter, Area and Volume	166–172	123–126
	Measurement of area Find areas of regular and irregular shapes by counting squares on grids in order to develop an understanding of square units				
Capacity/Volume	Measurement of volume Find volume/capacity of objects by packing or filling them in order to develop an understanding of cubic units	Weeks 3–4	Unit 1.8: Capacity and Volume	34–38	28–30
	Practical Measuring - Estimate and practically measure 3-D objects using measuring instruments such as: - measuring spoons - measuring cups, - measuring jugs - Record, compare and order capacity and volume of 3D objects in millilitres (ml) and litres (l)				
Time	Calculations and problem-solving - Solve problems in contexts involving capacity/volume - Convert between millilitres and litres limited to examples with whole numbers and fractions	Week 5	Unit 1.6: Time	21–26	20–23
	Reading time and time instruments - Read, tell and write time in 12-hour and 24-hour formats on both analogue and digital instruments in: - hours - minutes - seconds - Instruments include clocks, watches and stopwatches				
	Reading calendars Calculations and problem solving time include: - problems in contexts involving time - calculation of time intervals where time is given in				

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 5		
			Unit	LB	TG
Time	– seconds and/or minutes – minutes and/or hours – hours and/or days – days, weeks and/or months – years and/or decades	Week 5	Unit 1.6: Time	21–26	20–23
Use all four basic operations to solve problems in context	Solving problems • Solve problems in contexts involving whole numbers and fractions, including: – financial contexts – measurement contexts – fractions, including grouping and equal sharing – comparing two or more quantities of the same kind (ratio) – comparing two quantities of different kinds (rate)	Weeks 6–7	Unit 4.10: Number sentences	181–183	132–133
Revision		Week 8	Unit 1.9: Revision Unit 2.10: Revision Unit 3.13: Revision Unit 4.12: Revision	39 87 140 186	31 65 104 136
	Formal Assessment Task: Test	Week 9–10			

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Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 6		
			Unit	LB	TG
Whole numbers	Counting, ordering, comparing, representing and place value (6–9 digit numbers) • Order, compare and represent numbers up to at least 9-digit numbers • Represent prime numbers to at least 100 • Recognise the place value of digits in whole numbers to at least 9-digit numbers • Round off to the nearest 5, 10, 100 and 1 000	Weeks 1–2	Unit 1.1: Whole numbers: Counting, ordering, comparing, representing and place value Unit 2.1: Whole numbers: Counting, ordering, comparing, representing and place value (9-digit numbers)	1–2 54	4–5 45
	Addition and subtraction • Addition and subtraction of whole numbers with at least 5-digit and 6-digit numbers Calculation techniques • Using a range of techniques to perform and check written and mental calculations with whole numbers including: – estimation – adding, subtracting in columns – building up and breaking down numbers – rounding off and compensating – using a number line – using addition and subtraction as inverse operations – using a calculator Properties of whole numbers • Recognise and use the commutative; associative; distributive properties of whole numbers • 0 in terms of its additive property Solving problems • Solve problems involving whole numbers and decimal fractions, including: – financial contexts – measurement contexts	Weeks 3–4	Unit 1.3: Whole numbers: Addition and subtraction (5-digit numbers)	6–12	8–11

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 6		
			Unit	LB	TG
Whole numbers	Multiplication • Multiplication of at least whole 4-digit by 3-digit numbers • Multiple operations on whole numbers with or without brackets Calculation techniques • Use any two of the range of techniques to perform and check written and mental calculations with whole numbers including: – estimation – multiplying in columns – building up and breaking down numbers – doubling and halving – using multiplication and division as inverse operations – using a calculator	Weeks 5–7	Unit 2.2: Whole numbers: Multiplication (6-digit by 2-digit numbers)	55–59	46–48
	Number range for multiples and factors • Multiples of 2-digit and 3-digit numbers • Factors of 2-digit and 3-digit whole numbers • Prime factors of numbers to at least 100 Properties of whole numbers • Recognize and use the commutative; associative; distributive properties of whole numbers • 1 in terms of its multiplicative property Solving problems • Solve problems involving whole numbers and decimal fractions, including: – financial contexts – measurement contexts • Solve problems involving whole numbers, including: – comparing two or more quantities of the same kind (ratio) – comparing two quantities of different kinds (rate) Formal Assessment Task: Assignment				

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 6		
			Unit	LB	TG
Whole numbers	Division • Division of at least whole 4-digit by 3-digit numbers • Multiple operations on whole numbers with or without brackets Calculation techniques • Use any two of the range of techniques to perform and check written and mental calculations with whole numbers including: – estimation – long division – building up and breaking down numbers – doubling and halving – using multiplication and division as inverse operations – using a calculator	Weeks 8–9	Unit 2.6: Whole numbers: Division (4-digit by 2-digit numbers)	73–80	58–61
	Number range for multiples and factors • Multiples of 2-digit and 3-digit numbers • Factors of 2-digit and 3-digit whole numbers • Prime factors of numbers up to at least 100				
	Properties of whole numbers • Recognise and use the commutative; associative; distributive properties of whole numbers • 1 in terms of its multiplicative property				
Revision	Solving problems • Solve problems involving whole numbers and decimal fractions, including: – financial contexts – measurement contexts • Solve problems involving whole numbers, including: – comparing two or more quantities of the same kind (ratio) – comparing two quantities of different kinds (rate) – grouping and equal sharing with remainders	Week 10	Unit 1.9: Revision	49	42
	Formal Assessment Task: Test	Week 11			

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 6		
			Unit	LB	TG
Number sentences	• Write number sentences to describe problem situations • Solve and complete number sentences by: – inspection – trial and improvement Check solutions by substitution	Weeks 1–2	Unit 1.2: Number sentences	3–5	6–7
Numeric patterns	Investigate and extend patterns • Investigate and extend numeric patterns looking for relationships or rules of patterns: – sequences involving a constant difference or ratio – of learner's own creation – represented in tables • Describe observed relationships or rules in learner's own words Input and output values • Determine input values, output values and rules for the patterns and relationships using: – flow diagrams – tables Equivalent forms • Determine equivalence of different descriptions of the same relationship or rule presented: – verbally – in a flow diagram by a number sentence	Weeks 2–4	Unit 1.8: Numeric patterns	45–48	37–41
Geometric patterns	Investigate and extend patterns • Investigate and extend numeric patterns looking for relationships or rules of patterns: – represented in physical or diagram form – sequences involving a constant difference or ratio – of learner's own creation • Describe observed relationships or rules in learner's own words	Weeks 4–5	Unit 2.4: Geometric patterns	65–70	52–56

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 6		
			Unit	LB	TG
Geometric patterns	Input and output values - Determine input values, output values and rules for the patterns and relationships using: - flow diagrams - tables	Weeks 4–5	Unit 2.4: Geometric patterns	65–70	52–56
	Equivalent forms - Determine equivalence of different descriptions of the same relationship or rule presented: - verbally - in a flow diagram - by a number sentence				
Common fractions	Describing and ordering fractions: Compare and order common fractions, including specifically tenths and hundredths	Weeks 5–7	Unit 1.4: Common fractions	13–22	12–20
	Calculations with fractions: - Addition and subtraction of common fractions in which one denominator is a multiple of another - Addition and subtraction of mixed numbers - Fractions of whole numbers Solving problems - Solve problems in contexts involving common fractions, including grouping and sharing Percentages - Find percentages of whole numbers Equivalent forms: - Recognise and use equivalent forms of common fractions with 1-digit or 2-digit denominators (fractions in which one denominator is a multiple of another) - Recognise equivalence between common fraction, decimal fraction and percentage forms of the same number				

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 6		
			Unit	LB	TG
Decimal fractions	Recognising, ordering and place value of decimal fractions - Count forwards and backwards in decimal fractions to at least two decimal places - Compare and order decimal fractions to at least two decimal places - Place value of digits to at least two decimal places	Weeks 8–9	Unit 2.7: Decimal fractions	81–90	62–73
	Calculations with decimal fractions - Addition and subtraction of decimal fractions of at least two decimal places - Multiply decimal fractions by 10 and 100				
	Solving problems Solve problems in context involving decimal fractions				
Revision	Equivalent forms: - Recognise equivalence between common fraction and decimal fraction forms of the same number - Recognise equivalence between common fraction, decimal fraction and percentage forms of the same number	Week 10	Unit 2.9: Revision	96	77
	Formal Assessment Task: Test	Week 11			

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 6		
			Unit	LB	TG
Length	Practical measuring - Estimate and practically measure 2D shapes and 3-D objects using measuring instruments such as: - rulers - metre sticks - tape measures - trundle wheels - Record, compare and order lengths of shapes and objects in millimetres (mm), centimetres (cm), metres (m), kilometres (km) Calculations and problem-solving - Solve problems in contexts involving length - Convert between - millimetres (mm), - centimetres (cm), - metres (m) and - kilometres (km) to - Conversion should include fraction and decimal forms (to 2 decimal places)	Weeks 1–2	Unit 3.11: Length	145–149	116–117
Properties of 2D shapes	Range of shapes - Regular and irregular polygons - triangles, squares, rectangles, parallelograms, other quadrilaterals, pentagons, hexagons, heptagons, octagons - Similarities and differences between rectangles and parallelograms Features of shapes - Describe, sort and compare 2-D shapes in terms of - number of sides - length of sides - size of angles ✓ acute ✓ right ✓ obtuse ✓ straight	Weeks 2–4	Unit 3.5: Properties of 2D shapes	118–121	90–92

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 6		
			Unit	LB	TG
Properties of 2D shapes	✓ reflex ✓ revolution Further activities • Draw 2-D shapes on grid paper • Draw circles, patterns in circles and patterns with circles using a pair of compasses Angles • Recognise and name the following angles in 2-D shapes: – acute – right – obtuse – straight – reflex – revolution	Weeks 2–4	Unit 3.5: Properties of 2D shapes	118–121	90–92
Symmetry and transformations	Symmetry Recognise, draw and describe lines of symmetry in 2D shapes. Use transformations to make composite shapes Make composite 2D shapes including shapes with line symmetry by tracing and moving a 2D shape in one or more of the following ways: – by rotation – by translation – by reflection Use transformations to make tessellations Make tessellated patterns including some patterns with line symmetry by tracing and moving 2D shapes in one or more of the following ways: – by rotation – by translation – by reflection	Weeks 5–6	Unit 3.6: Transformation	122–124	93

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 6		
			Unit	LB	TG
Symmetry and transformations	Describe patterns Refer to lines, 2-D shapes, 3-D objects and/or lines of symmetry and/ or rotations and/or reflections and/or translations when describing patterns – in nature – from modern everyday life – from our cultural heritage Enlargement and reductions • Draw enlargement and reductions of 2-D shapes to compare size and shape of – triangles – quadrilaterals	Weeks 5–6	Unit 3.6: Transformation	122–124	93
Properties of 3D objects	Range of objects • Recognise, visualise and name 3-D objects in the environment and geometric settings, focusing on: – rectangular prisms – cubes – tetrahedrons – pyramids – similarities and differences between tetrahedrons and other pyramids Characteristics of objects • Describe, sort and compare 3-D objects in terms of: – number and shape of faces – number of vertices – number of edges Further activities • Make 3-D models using: – drinking straws, toothpicks etc. – nets	Week 7	Unit 4.4: Properties of 3D objects	164–168	131–133

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 6		
			Unit	LB	TG
Area, perimeter and volume	Perimeter - Measure perimeter using rulers or measuring tapes Measurement of area - Continue to find areas of regular and irregular shapes by counting squares on grids - Develop rules for calculating the areas of squares and rectangles Measurement of volume - Continue to find volume/capacity of objects by packing or filling them - Develop an understanding of why the volume of rectangular prisms is given by length multiplied by width multiplied by height	Weeks 8–9	Unit 4.5: Perimeter, area and volume	169–175	134–136
	Investigate: - Relationship between perimeter and area of rectangles and squares. - Relationship between surface area and volume of rectangular prisms				
Revision		Week 10	Unit 2.9: Revision Unit 3.12: Revision Unit 4.12: Revision	96 150 194	77 119 147
	Formal Assessment Task: Test	Week 11			

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 6		
			Unit	LB	TG
Mass	Practical measuring - Estimate and practically measure 3-D objects using measuring instruments such as: - bathroom scales (analogue and digital); - kitchen scales (analogue and digital) - balances - Record, compare and order mass of objects in grams (g) and kilograms (kg). Calculations and problem-solving - Solve problems in contexts involving mass - Convert between grams and kilograms to include fraction and decimal forms (to 2 decimal places)	Weeks 1–2	Unit 3.1: Mass	101–105	80–81
Time	Reading time and time instruments - Read, tell and write time in 12-hour and 24-hour formats on both analogue and digital instruments in: - hours - minutes - seconds - Instruments include clocks, watches and stopwatches Reading calendars Calculations and problem-solving related to time - Solve problems in contexts involving time - Read time zone maps and calculating time differences based on time zones - Calculation of time intervals where time is given in: - seconds and/or minutes; - minutes and/or hours - hours and /or days - days and/or weeks and/or months - years and/or decades - centuries, decades and years	Week 3	Unit 1.5: Time	23–26	21–22

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 6		
			Unit	LB	TG
Capacity and volume	Practical measuring - Estimate and practically measure 3D objects using measuring instruments, such as: - measuring spoons - measuring cups - measuring jugs - Record, compare and order capacity and volume of 3D objects in millilitres, litres, and kilolitres. Calculations and problem-solving - Solve problems in contexts involving capacity/volume - Convert between kilolitres, litres and millilitres to include fraction and decimal forms (to 2 decimal places)	Week 4			
Data handling	Collecting and organising data Collect data - Use tally marks and tables for recording - Use simple questionnaires (yes/no type response) - Order data from smallest group to largest group Note: Provide learners with data to save time. Representing data - Draw a variety of graphs to display and interpret data including: - pictographs with many-to-one representations - bar graphs and double bar graphs Analysing, interpreting and reporting data - Critically read and interpret data represented in: - words - pictographs - bar graphs - double bar graphs - pie charts - Analyse data by answering questions related to: - data categories, including data intervals	Weeks 5–6	Unit 1.7: Data handling Unit 3.9: Data handling	35–44 131–139	27–36 101–109

Topic	Content	Time allocation	Where to find it in Premier Mathematics Grade 6		
			Unit	LB	TG
Data handling	– data sources and contexts – central tendencies – (mode and median) • Summarise data verbally and in short written paragraphs that include – drawing conclusions about the data – making predictions based on the data	Weeks 5–6	Unit 1.7: Data handling Unit 3.9: Data handling	35–44 131–139	27–36 101–109
Use all four basic operations to solve problems in context	Solving problems • Solve problems in contexts involving whole numbers and fractions, including: – financial contexts – measurement contexts – fractions, including grouping and equal sharing – comparing two or more quantities of the same kind (ratio) – comparing two quantities of different kinds (rate)	Week 7	Unit 4.8: Number sentences	184–186	142–143
Revision		Week 8	Unit 1.9: Revision Unit 3.12: Revision Unit 4.12: Revision	49 150 194	42 119 147
	Formal Assessment Task: Test	Weeks 9–10			

PROGRAMME OF ASSESSMENT

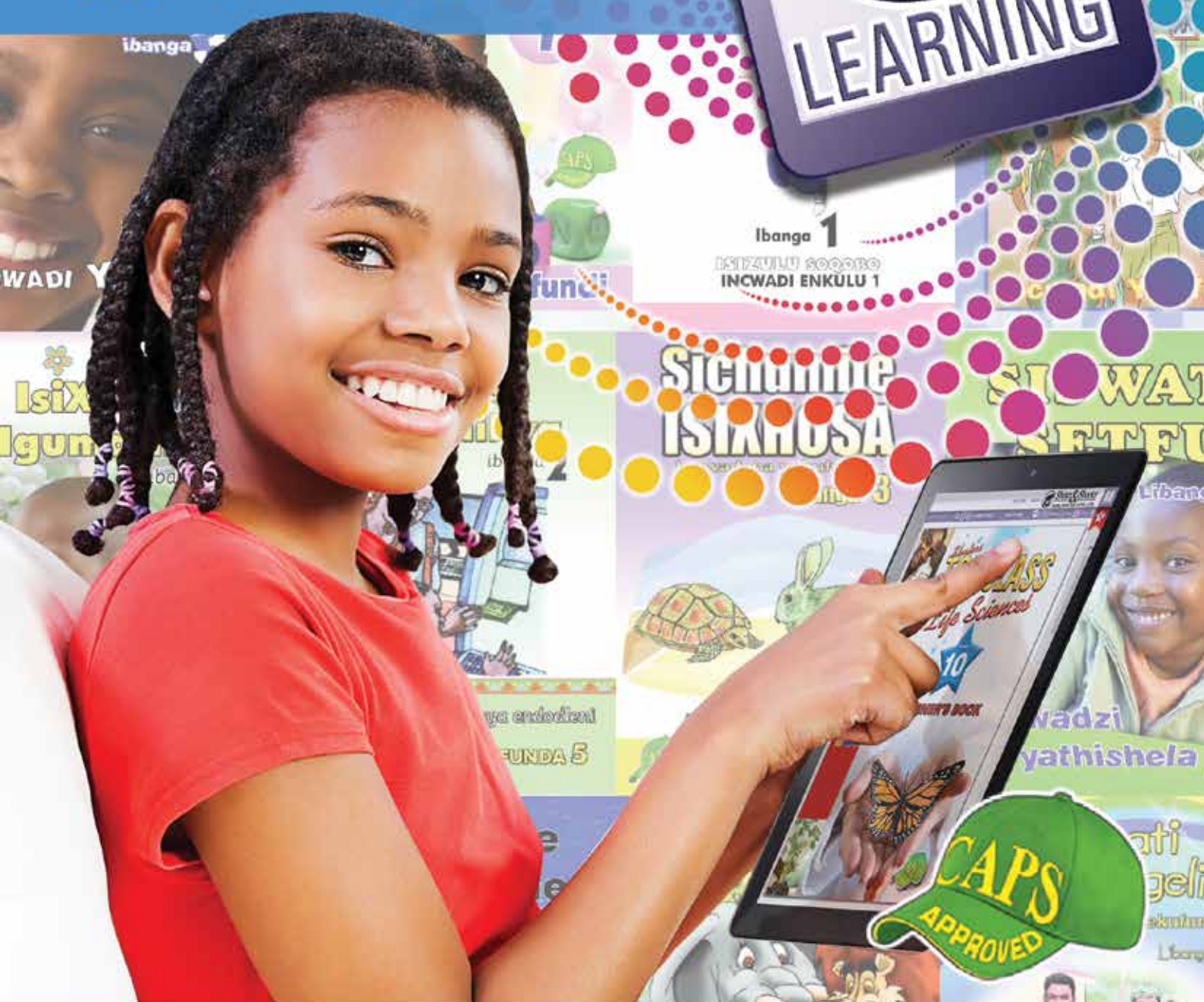
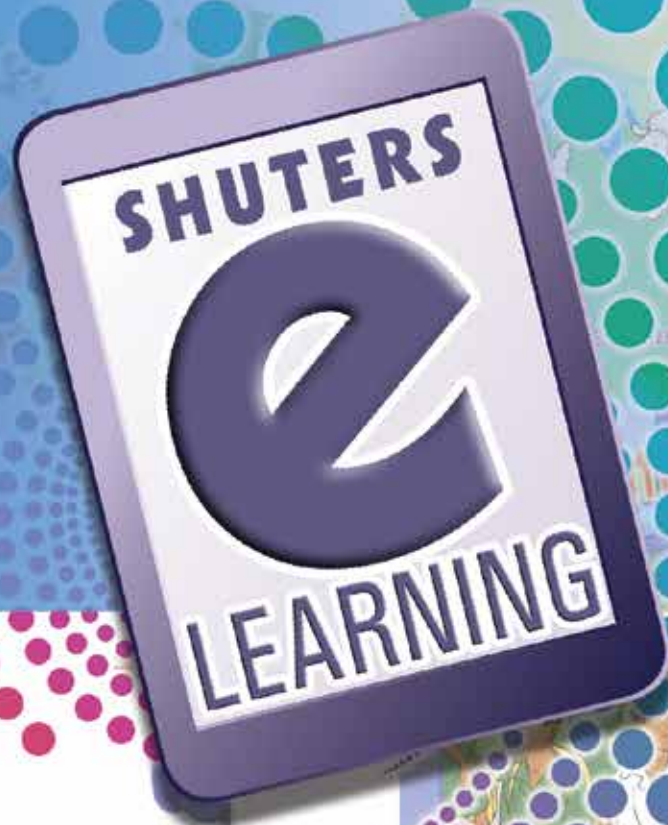
Grade 4		
Term	Assessment task	Page references
1	Assignment	TG page 210
	Test	TG page 218
2	Investigation	TG page 212
	Test	TG page 224
3	Test	TG page 230
4	Test	TG page 236

Grade 5		
Term	Assessment task	Page references
1	Assignment	TG page 206
	Test	TG page 214
2	Investigation	TG page 212
	Test	TG page 218
3	Test	TG page 224
4	Test	TG page 227

Grade 6		
Term	Assessment task	Page references
1	Assignment	TG page 221
	Test	TG page 229
2	Investigation	TG page 226
	Test	TG page 232
3	Test	TG page 235
4	Test	TG page 240



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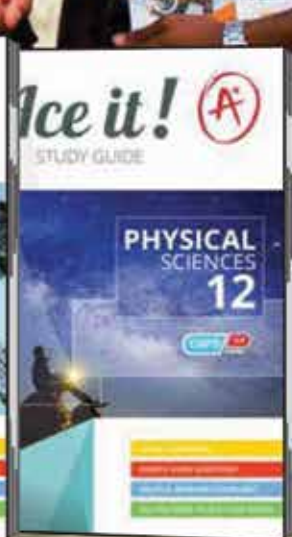
8-12

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