

EXTENSION LEARNING OUTCOMES IN BOLD					
	TERM	UNIT / LESSON	STEPS (GRADES) FROM ...	STEPS (GRADES) FROM ...	LEARNING OUTCOME
	SPRING	4 Fractions, ratio and percentages	6th (grade 3)	10th (grade 7)	
15	01/01/2018	4.1 Fractions	6th (grade 3)	8th (grade 5)	Add, subtract, multiply and divide fractions and mixed numbers.
16	08/01/2018				Find the reciprocal of an integer, decimal or fraction.
17	15/01/2018	4.2 Ratios	6th (grade 3)	7th (grade 4)	Write ratios in the form 1 : n or n : 1. Compare ratios. Find quantities using ratios. Solve problems involving ratios.
		4.3 Ratio and proportion	6th (grade 3)	8th (grade 5)	Convert between currencies and measures. Recognise and use direct proportion. Solve problems involving ratios and proportion.
		4.4 Percentages	6th (grade 3)	9th (grade 6)	Work out percentage increases and decreases. Solve real-life problems involving percentages.
		4.5 Fractions, decimals and percentages UNIT 4 TEST	6th (grade 3)	10th (grade 7)	Work out percentage increases and decreases. Solve real-life problems involving percentages.
	SPRING	5 Angles and trigonometry	6th (grade 3)	9th (grade 6)	
18	22/01/2018	5.1 Angle properties of triangles and quadrilaterals	6th (grade 3)	6th (grade 3)	Derive and use the sum of angles in a triangle and in a quadrilateral.
19	29/01/2018				Derive and use the fact that the exterior angle of a triangle is equal to the sum of the two opposite interior angles.
20	05/02/2018	5.2 Interior angles of a polygon	6th (grade 3)	7th (grade 4)	Calculate the sum of the interior angles of a polygon. Use the interior angles of polygons to solve problems.
		5.3 Exterior angles of a polygon	6th (grade 3)	8th (grade 5)	Know the sum of the exterior angles of a polygon. Use the angles of polygons to solve problems.
		5.4 Pythagoras' theorem 1	7th (grade 4)	7th (grade 4)	Calculate the length of the hypotenuse in a right-angled triangle. Solve problems using Pythagoras' theorem.
		5.4 Pythagoras' theorem 1	8th (grade 5)	8th (grade 5)	Calculate the length of a shorter side in a right-angled triangle. Solve problems using Pythagoras' theorem.
		5.6 Trigonometry 1	6th (grade 3)	9th (grade 6)	Use trigonometric ratios to find lengths in a right-angled triangle. Use trigonometric ratios to solve problems.
		5.7 Trigonometry 2	6th (grade 3)	9th (grade 6)	Use trigonometric ratios to calculate an angle in a right-angled triangle. Find angles of elevation and angles of depression. Use trigonometric ratios to solve problems.
		UNIT 5 TEST			Know the exact values of the sine, cosine and tangent of some angles.

	12/02/2018	HALF TERM			
21	19/02/2018	REVISION & TEST	OFFICIAL COMBINED UNIT TESTS: 3, 4 & 5		
	SPRING	6 Graphs	6th (grade 3)	10th (grade 7)	
22	26/02/2018	6.1 Linear graphs	6th (grade 3)	8th (grade 5)	Find the gradient and y-intercept from a linear equation. Rearrange an equation into the form $y = mx + c$.
23	05/03/2018				Compare two graphs from their equations.
24	12/03/2018				
25	19/03/2018				
		6.2 More linear graphs	7th (grade 4)	8th (grade 5)	Sketch graphs using the gradient and intercepts. Find the equation of a line, given its gradient and one point on the line. Find the gradient of a line through two points.
		6.3 Graphing rates of change	6th (grade 3)	10th (grade 7)	Draw and interpret distance–time graphs. Calculate average speed from a distance–time graph. Understand velocity–time graphs. Find acceleration and distance from velocity–time graphs.
		6.4 Real-life graphs	6th (grade 3)	8th (grade 5)	Draw and interpret real-life linear graphs. Recognise direct proportion. Draw and use a line of best fit.
		6.5 Line segments	6th (grade 3)	10th (grade 7)	Find the coordinates of the midpoint of a line segment. Find the gradient and length of a line segment. Find the equations of lines parallel or perpendicular to a given line.
		6.6 Quadratic graphs	7th (grade 4)	10th (grade 7)	Draw quadratic graphs. Solve quadratic equations using graphs. Identify the line of symmetry of a quadratic graph. Interpret quadratic graphs relating to real-life situations.
		6.7 Cubic and reciprocal graphs	8th (grade 5)	10th (grade 7)	Draw graphs of cubic functions. Solve cubic equations using graphs. Draw graphs of reciprocal functions. Recognise a graph from its shape.
		6.8 More graphs	7th (grade 4)	9th (grade 6)	Interpret linear and non-linear real-life graphs. Draw the graph of a circle.
		UNIT 6 TEST			
26	26/03/2018	PROBLEM-SOLVING ACTIVITIES			