

	TERM	UNIT / LESSON	STEPS (GRADES) FROM ...	STEPS (GRADES) FROM ...	LEARNING OUTCOME
	SPRING	12 Right-angled triangles	3rd (grade 2)	8th (grade 5)	
15	01/01/2018	12.1 Pythagoras' theorem 1	3rd (grade 2)	7th (grade 4)	Understand Pythagoras' theorem.
16	08/01/2018				Calculate the length of the hypotenuse in a right-angled triangle.
17	15/01/2018				Solve problems using Pythagoras' theorem.
		12.2 Pythagoras' theorem 2	7th (grade 4)	8th (grade 5)	Calculate the length of a line segment AB. Calculate the length of a shorter side in a right-angled triangle.
		12.3 Trigonometry: the sine ratio 1	6th (grade 3)	8th (grade 5)	Understand and recall the sine ratio in right-angled triangles. Use the sine ratio to calculate the length of a side in a right-angled triangle. Use the sine ratio to solve problems.
		12.4 Trigonometry: the sine ratio 2	6th (grade 3)	8th (grade 5)	Use the sine ratio to calculate an angle in a right-angled triangle. Use the sine ratio to solve problems.
		12.5 Trigonometry: the cosine ratio	6th (grade 3)	8th (grade 5)	Understand and recall the cosine ratio in right-angled triangles. Use the cosine ratio to calculate the length of a side in a right-angled triangle. Use the cosine ratio to calculate an angle in a right-angled triangle. Use the cosine ratio to solve problems.
		12.6 Trigonometry: the tangent ratio	6th (grade 3)	8th (grade 5)	Understand and recall the tangent ratio in right-angled triangles. Use the tangent ratio to calculate the length of a side in a right-angled triangle. Use the tangent ratio to calculate an angle in a right-angled triangle. Solve problems using an angle of elevation or depression.
		12.7 Finding lengths and angles using trigonometry	7th (grade 4)	8th (grade 5)	Understand and recall trigonometric ratios in right-angled triangles. Use trigonometric ratios to solve problems.
		UNIT 12 TEST			Know the exact values of the sine, cosine and tangent of some angles.
	SPRING	13 Probability	3rd (grade 2)	8th (grade 5)	
18	22/01/2018	13.1 Calculating probability	3rd (grade 2)	6th (grade 3)	Calculate simple probabilities from equally likely events.
19	29/01/2018				Understand mutually exclusive and exhaustive outcomes.
20	05/02/2018	13.2 Two events	6th (grade 3)	6th (grade 3)	Use two-way tables to record the outcomes from two events. Work out probabilities from sample space diagrams.
		13.3 Experimental probability	3rd (grade 2)	7th (grade 4)	Find and interpret probabilities based on experimental data. Make predictions from experimental data.
		13.4 Venn diagrams	4th (grade 2)	6th (grade 3)	Use Venn diagrams to work out probabilities. Understand the language of sets and Venn diagrams.
		13.5 Tree diagrams	5th (grade 3)	8th (grade 5)	Use frequency trees and tree diagrams. Work out probabilities using tree diagrams. Understand independent events.
		13.6 More tree diagrams	6th (grade 3)	8th (grade 5)	Understand when events are not independent. Solve probability problems involving events that are not independent.
		UNIT 13 TEST			

	12/02/2018	HALF TERM			
	SPRING	Multiplicative reasoning	5th (grade 3)	8th (grade 5)	
21	19/02/2018	14.1 Percentages	7th (grade 4)	7th (grade 4)	Calculate a percentage profit or loss.
22	26/02/2018				Express a given number as a percentage of another in more complex situations.
23	05/03/2018				Find the original amount given the final amount after a percentage increase or decrease
		14.2 Growth and decay	7th (grade 4)	7th (grade 4)	Find an amount after repeated percentage change. Solve growth and decay problems.
		14.3 Compound measures	5th (grade 3)	7th (grade 4)	Solve problems involving compound measures.
		14.4 Distance, speed and time	5th (grade 3)	7th (grade 4)	Convert between metric speed measures. Calculate average speed, distance and time. Use formulae to calculate speed and acceleration.
		14.5 Direct and inverse proportion	6th (grade 3)	8th (grade 5)	Use ratio and proportion in measures and conversions.
		UNIT 14 TEST			Use inverse proportions.
24	12/03/2018	REVISION & TEST	OFFICIAL COMBINED UNIT TESTS: 12, 13 & 14		
	SPRING	15 Constructions, loci and bearings	1st (grade 1)	7th (grade 4)	
25	19/03/2018	15.1 3D solids	1st (grade 1)	4th (grade 2)	Recognise 3D shapes and their properties.
26	26/03/2018				Describe 3D shapes using the correct mathematical words. Understand the 2D shapes that make up 3D objects.
		15.2 Plans and elevations	6th (grade 3)	6th (grade 3)	Identify and sketch planes of symmetry of 3D shapes. Understand and draw plans and elevations of 3D shapes. Sketch 3D shapes based on their plans and elevations.
		15.3 Accurate drawings 1	5th (grade 3)	6th (grade 3)	Make accurate drawings of triangles using a ruler, protractor and compasses. Identify SSS, ASA, SAS and RHS triangles as unique from a given description. Identify congruent triangles
		15.4 Scale drawings and maps	4th (grade 2)	6th (grade 3)	Draw diagrams to scale. Correctly interpret scales in real-life contexts. Use scales on maps and diagrams to work out lengths and distances. Know when to use exact measurements and estimations on scale drawings and maps. Draw lengths and distances correctly on given scale drawings.
		15.5 Accurate drawings 2	6th (grade 3)	6th (grade 3)	Accurately draw angles and 2D shapes using a ruler, protractor and compasses. Construct a polygon inside a circle. Recognise nets and make accurate drawings of nets of common 3D objects.
		15.6 Constructions	7th (grade 4)	7th (grade 4)	Draw accurately using rulers and compasses. Bisect angles and lines using rulers and compasses.
		15.7 Loci and regions	7th (grade 4)	7th (grade 4)	Draw loci for the path of points that follow a given rule. Identify regions bounded by loci to solve practical problems.
		15.8 Bearings	4th (grade 2)	7th (grade 4)	Find and use three-figure bearings. Use angles at parallel lines to work out bearings. Solve problems involving bearings and scale diagrams.
		UNIT 15 TEST			