Month	# of Days	Core Standard	Strand	Content	Skills	Activities	Assessments
Aug.	4	8.7.2.A 8.7.3.A	Geometry	**Chapter 1: Circles** **Unit 1: Introduction** • Basic definitions 　○ Center 　○ Radius 　○ Chord 　○ Diameter 　○ Arc • Chords and distance from the center • Properties of tangent line to a circle • Relative positions of two circles	• Define and understand basic parts of a circle • Calculate the length of a chord of a circle under some conditions • Calculate the distance of a chord from the center of a circle under a given condition • Identify unknown measure of a chord or line segment in a circle using properties of tangent to a circle • Apply relative positions of two circles in solving word problems	• Group Work • Mini-Research Projects • Computer Projects • Worksheets	• Group Presentations • Individual Presentations • Worksheets

Month	# of Days	Core Standard	Strand	Content	Skills	Activities	Assessments
Sept.	2	8.7.3.A	Geometry	**Chapter 1: Circles** **Unit 2: Arc length and area of a sector** • Circumference and area of a circle • Arc length • Area of a sector	• Calculate circumference and area of a circle • Calculate the length of an arc of a circle • Calculate the area of the sector of a circle	• Group Work • Mini-Research Projects • Computer Projects • Worksheets	• Group Presentations • Individual Presentations • Worksheets
	3	8.7.2.A	Geometry	**Chapter 1: Circles** **Unit 3: Angles related to a circle** • Intercepted arc • Central angle • Inscribed angle	• Define and understand the concept of intercepted arc, central angle and inscribed angle • Determine the relationship of the central angle to its intercepted arc and inscribed angle to its intercepted arc • Solve unknown angles in the circle	• Group Work • Mini-Research Projects • Computer Projects • Worksheets	• Group Presentations • Individual Presentations • Worksheets

Month	# of Days	Core Standard	Strand	Content	Skills	Activities	Assessments
Oct.	3	8.7.2.A	Geometry	**Chapter 1: Circles** **Unit 4: Circle theorems** • Angle with vertex inside the circle • Angle with vertex outside the circle	• Define and understand the concept of angle whose vertex is inside or outside the circle • Determine the relationship of the angle with its vertex inside the circle with its intercepted arcs and angles with its vertex outside the circle to its intercepted arcs • Solve unknown angles in the circle	• Group Work • Mini-Research Projects • Computer Projects • Worksheets	• Group Presentations • Individual Presentations • Worksheets
	2		Geometry	**Chapter 1: Circles** **Comprehensive Project** • Comprehensive group project intended to demonstrate the students comprehensive understanding and functional knowledge of the material from Chapter 1.	• Students will demonstrate their functional knowledge of the material from Chapter 1.	• Comprehensive Group Project • Preferred for the students to do the project outside of class and present their results to the class.	• Presentation of the Group Project to the class.

The Asian International School Curriculum Mapping

<u>Grade: 9 (Intermediate)</u>   Subject: Mathematics   <u>School Year: 2018-2019</u>

Month	# of Days	Core Standard	Strand	Content	Skills	Activities	Assessments
	2		Geometry	**Review for Midterm Exam** Chapter 1: Circles • Unit 1: Introduction • Unit 2: Arc length and area of a sector • Unit 3: Angles related to a circle • Unit 4: Circle theorems			
MIDTERM EXAM							

Oct.	2	8.10.1.A
		
		8.10.2.A
			Geometry	**Chapter 2: Cylinders, Cones, and Spheres**
				
				Unit 1: Cylinders
				
				• Terminology
				   o Height
				   o Lateral Surface
				   o Volume
				
				• Lateral Area
				
				• Volume
					• Define and understand lateral surface, height or altitude of cylinder and volume
					
					• Calculate the lateral area and volume of a cylinder
					
					• Solve word problems involving lateral area and volume of cylinders
						• Group Work
						• Mini-Research Projects
						• Computer Projects
						• Worksheets
							• Group Presentations
							• Individual Presentations
							• Worksheets

The Asian International School Curriculum Mapping

Grade: 9 (Intermediate)   Subject: Mathematics   School Year: 2018-2019

Month	# of Days	Core Standard	Strand	Content	Skills	Activities	Assessments
Nov.	2	8.10.1.A 8.10.2.A	Geometry	**Unit 2: Cones** • Truncated cone • Lateral area of a cone • Volume of a cone	• Identify the parts of a cone • Calculate the lateral area of a cone • Calculate the volume of a cone • Calculate the volume of a truncated cone • Solve word problems involving volume of a cone	• Group Work • Mini-Research Projects • Computer Projects • Worksheets	• Group Presentations • Individual Presentations • Worksheets
	2	8.10.2.A	Geometry	**Unit 3: Spheres** • Surface area • Volume	• Calculate the surface area of a sphere • Calculate the volume of a sphere • Solve word problems involving surface area and volume of a sphere	• Group Work • Mini-Research Projects • Computer Projects • Worksheets	• Group Presentations • Individual Presentations • Worksheets

The Asian International School Curriculum Mapping

Month	# of Days	Core Standard	Strand	Content	Skills	Activities	Assessments
	2		Geometry	**Chapter 2: Cylinders, Cones, and Spheres** **Comprehensive Project** Comprehensive group project intended to demonstrate the students comprehensive understanding and functional knowledge of the material from Chapter 2.	• Students will demonstrate their functional knowledge of the material from Chapter 2.	• Comprehensive Group Project • Preferred for the students to do the project outside of class and present their results to the class.	• Presentation of the Group Project to the class.
Dec.	2		Geometry	**Review for Final Exam**	**Chapter 2: Cylinders, Cones, and Spheres** • Unit 1: Cylinders • Unit 2: Cones • Unit 3: Spheres		
FINAL EXAM							

Month	# of Days	Core Standard	Strand	Content	Skills	Activities	Assessments
Jan.	3	7.9.1.A 7.10.3.A	Patterns, Functions, and Algebra	**Chapter 3: Linear Functions** **Unit 1: Graphs of Linear Functions** • Definitions ○ Slope ○ x-intercept ○ y-intercept • Graphing linear functions by; ○ Slope-intercept method ○ x- and y-intercepts ○ Slope and a point	• Define and understand the meaning of slope, x- and y-coordinates, x- and y-intercepts, points or coordinates • Graphing linear functions by; ○ slope-intercept method ○ x- and y-intercepts ○ slope and a point • Determine a linear function from a given graph	• Group Work • Mini-Research Projects • Computer Projects • Worksheets	• Group Presentations • Individual Presentations • Worksheets

Month	# of Days	Core Standard	Strand	Content	Skills	Activities	Assessments
Feb.	4	7.5.2.A	Patterns, Functions, and Algebra	**Chapter 3: Linear Functions** **Unit 2: Linear Equations in Two Variables** • Solution by graphing • Solution by substitution • Solving word problems	• Graph linear equations using the different methods • Solve word problems involving solutions to system of linear equations	• Group Work • Mini-Research Projects • Computer Projects • Worksheets	• Group Presentations • Individual Presentations • Worksheets

	4	7.8.1.A
		
		7.9.2.A
			Patterns, Functions, and Algebra	**Chapter 3: Linear Functions**
				
				Unit 3: Solution to System of Linear Equations (No calculator)
				
				• Graphing
				
				• Substitution
				
				• Word Problems
					• Solve system of linear equations in more than two variables by;
					
					   ○ Graphing
					
					   ○ Substitution
					
					• Solve simple word problems involving solutions to system of linear equations
						• Group Work
						• Mini-Research Projects
						• Computer Projects
						• Worksheets
							• Group Presentations
							• Individual Presentations
							• Worksheets

Month	# of Days	Core Standard	Strand	Content	Skills	Activities	Assessments
	2		Patterns, Functions, and Algebra	**Chapter 3: Linear Functions** **Comprehensive Project** Comprehensive group project intended to demonstrate the students comprehensive understanding and functional knowledge of the material from Chapter 3.	• Students will demonstrate their functional knowledge of the material from Chapter 3.	• Comprehensive Group Project • Preferred for the students to do the project outside of class and present their results to the class.	• Presentation of the Group Project to the class.
Mar.	2		Patterns, Functions, and Algebra	**Review for Midterm Exam**	**Chapter 3: Linear Functions** • Unit 1: Graphs of Linear Functions • Unit 2: Linear equations in two variables • Unit 3: Solution to system of Linear equations		
MIDTERM EXAM							

The Asian International School Curriculum Mapping

Grade: 9 (Intermediate)   Subject: Mathematics   School Year: 2018-2019

Month	# of Days	Core Standard	Strand	Content	Skills	Activities	Assessments
Mar.	3	7.11.2.A	Patterns, Functions, and Algebra	**Chapter 4: Quadratic Functions** **Unit 1: Introduction** • Table of values • Set of ordered pairs that describe a quadratic function	• Construct table of values for a given quadratic function • Tell whether a given table of values is quadratic or not • Determine a quadratic function given its table of values	• Group Work • Mini-Research Projects • Computer Projects • Worksheets	• Group Presentations • Individual Presentations • Worksheets

	4	7.2.2.C	Patterns, Functions, and Algebra	**Chapter 4: Quadratic Functions**
				
				Unit 2: Graphs of quadratic functions
				
				• Terminology
				  o Vertex
				  o Intercepts
				  o Line of symmetry
				  o Maximum and minimum point
				
				• Graphing
					• Identify the different parts of the graph of quadratic functions
					
					• Graph quadratic functions of the form;
					
					  o $y = ax^2$
					
					  o $y = ax^2 \pm c$
					
					  o $y = ax^2 + bx$
						• Group Work
						• Mini-Research Projects
						• Computer Projects
						• Worksheets
							• Group Presentations
							• Individual Presentations
							• Worksheets

The Asian International School Curriculum Mapping

Grade: 9 (Intermediate)   Subject: Mathematics   School Year: 2018-2019

Month	# of Days	Core Standard	Strand	Content	Skills	Activities	Assessments
Apr.	2		Patterns, Functions, and Algebra	**Chapter 4: Quadratic Functions** **Unit 3: Comprehensive Project** Comprehensive group project intended to demonstrate the students comprehensive understanding and functional knowledge of the material from Chapter 3.	• Students will demonstrate their functional knowledge of the material from Chapter 3.	• Comprehensive Group Project Preferred for the students to do the project outside of class and present their results to the class.	Presentation of the Group Project to the class.
	2		Patterns, Functions, and Algebra	**Review for Final Exam**	**Chapter 3: Linear Functions** • Unit 1: Introduction • Unit 2: Graphs of quadratic functions		
				FINAL EXAM			