شكراً لتحميلك هذا الملف من موقع المناهج الإماراتية

الخطة الفصلية منهج ريفيل

التواصل الاجتماعي بحسب الصف التاسع العام

روابط مواد الصف التاسع العام على تلغرام

التربية الاسلامية	اللغة العربية	اللغة الانجليزية	الرياضيات

المزيد من الملفات بحسب الصف التاسع العام والمادة رياضيات في الفصل الثاني

1	أسئلة الامتحان النهائي
2	أسئلة الامتحان النهائي
3	تجميعة أسئلة وفق الهيكل الوزاري - ريفيل
4	تجميعة أسئلة وفق الهيكل الوزاري
5	نموذج الهيكل الوزاري - ريفيل

UNITED ARAB EMIRATES
MINISTRY OF EDUCATION

الإمارات العربية المتحدة
وزارة التربية والتعليم

Grade 9 General Stream Mathematics (Reveal)
Scheme of Work, Term 2, Academic Year 2022-2023

Purpose
- to define the **required** General Stream Mathematics Student Learning Outcomes to be covered during the term for this grade
- to **recommend** the pace at which the Student Learning Outcomes are to be covered. The term's content is broken down into nine teaching weeks, allowing the coverage of topics within each week to be flexible.

Assessment
- Assessment details for Term 2 will be communicated separately.

Teachers should incorporate the Standards for Mathematical Practice (SMPs) in their instruction when and where appropriate. The Standards for Mathematical Practice are

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Why are the Standards for Mathematical Practice important?
The Standards for Mathematical Practice set expectations for using mathematical language and representations to reason, solve problems, and model in preparation for careers and a wide range of college majors.

Week 1: Jan. 2 – 6, 2023		
Integrated I Module 7 – Systems of Linear Equations and Inequalities		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M7L1 – Graphing Systems of Equations	• Determine the number of solutions of a system of linear equations. • Solve systems of equations by graphing. • Solve linear equations by graphing systems of equations. • Use graphing calculators to solve systems of equations.	**A.REI.6** Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. **A.REI.11** Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.
M7L2 – Substitution	• Solve systems of equations by using the substitution method.	**A.CED.3** Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context. **A.REI.6** Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

Week 2: Jan. 9 – 13, 2023		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M7L3 – Elimination Using Addition and Subtraction	• Solve systems of equations by eliminating a variable using addition. • Solve systems of equations by eliminating a variable using subtraction.	**A.CED.3** Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context. **A.REI.6** Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.
M7L4 – Elimination Using Multiplication	• Solve systems of equations by eliminating a variable using multiplication and addition.	**A.REI.5** Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. **A.REI.6** Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

Week 3: Jan. 16 – 20, 2023		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M7L5 – Systems of Inequalities	• Solve systems of linear inequalities by graphing.	**A.CED.3** Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context. **A.REI.12** Graph the solutions to a linear inequality in two variables as a halfplane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.

Week 4: Jan. 23 – 27, 2023		
Integrated I Module 10 – Tools of Geometry		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M10L2 – Points, Lines, and Planes	• Identify points, lines, and planes. • Identify intersections of lines and planes.	**G.CO.1** Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. **G.MG.1** Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).
M10L3 – Line Segments	• Calculate measures of line segments. • Apply the definition of congruent line segments to find missing values.	**G.CO.1** Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. **G.CO.12** Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). *Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.*

Week 5: Jan. 30 – Feb. 3, 2023		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M10L4 – Distance	• Find the length of a line segment on a number line. • Find the distance between two points on the coordinate plane.	**G.CO.1** Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.
M10L5 – Locating Points on a Number Line	• Find a point on a directed line segment on a number line that is a given fractional distance from the initial point. • Find a point that partitions a directed line segment on a number line in a given ratio.	**G.GPE.6** Find the point on a directed line segment between two given points that partitions the segment in a given ratio.

Week 6: Feb. 6 – 10, 2023		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M10L6 – Locating Points on a Coordinate Plane	• Find a point on a directed line segment on the coordinate plane that is a given fractional distance from the initial point. • Find a point that partitions a directed line segment on the coordinate plane in a given ratio.	**G.GPE.6** Find the point on a directed line segment between two given points that partitions the segment in a given ratio.
M10L7 – Midpoints and Bisectors	• Find the coordinate of a midpoint on a number line. • Find the coordinates of the midpoint or endpoint of a line segment on the coordinate plane. • Find missing values using the definition of a segment bisector.	**G.GPE.6** Find the point on a directed line segment between two given points that partitions the segment in a given ratio. **G.CO.12** Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). *Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.*

Week 7: Feb. 13 – 17, 2023		
Integrated I Module 11 – Angles and Geometric Figures		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M11L1 – Angles and Congruence	• Analyze figures using the definitions of angles and parts of angles. • Calculate angle measures using the definitions of congruent angles and angle bisectors. • Analyze figures using the characteristics of adjacent angles, linear pairs of angles, and vertical angles.	**G.CO.1** Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. **G.CO.12** Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). *Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.*
M11L2 – Angle Relationships	• Calculate angle measures using the characteristics of complementary and supplementary angles. • Calculate angle measures using the characteristics of perpendicular lines. • Demonstrate understanding of what can and cannot be assumed from a diagram.	

Week 8: Feb. 20 – 24, 2023		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M11L3 – Two-Dimensional Figures	• Find perimeters, circumferences, and areas of two-dimensional geometric shapes. • Calculate the measures of real-world objects.	**G.GPE.7** Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula. **G.MG.1** Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).
M11L5 – Three-Dimensional Figures	• Identify and determine characteristics of three-dimensional figures. • Calculate surface areas and volumes.	**G.MG.1** Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder). **G.GMD.3** Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.

Week 9: Feb. 27 – March 3, 2023		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M11L6 – Two-Dimensional Representations of Three-Dimensional Figures	• Identify the orthographic drawings that best model selected three-dimensional figures. • Calculate surface areas of three-dimensional figures represented by nets, and determine the correct nets for three-dimensional geometric figures.	**G.MG.1** Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).
M11L7 – Precision and Accuracy	• Determine the levels of precision and accuracy in real-world scenarios. • Calculate the approximate error of measurements. • Choose the appropriate level of accuracy of measurements when reporting quantities.	**N.Q.3** Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

Week 10: March 6 – 10, 2023 Week 11: March 13 – 17, 2023 Week 12: March 20 – 24, 2023
Term 2 Revision and End-of-Term Exam **Exam date to be determined by the Assessment Directorate**