شكراً لتحميلك هذا الملف من موقع المناهج الإماراتية

الخطة الفصلية المسار العام - ريفيل

التواصل الاجتماعي بحسب الصف السادس

روابط مواد الصف السادس على تلغرام

التربية الاسلامية	اللغة العربية	اللغة الانجليزية	الرياضيات

المزيد من الملفات بحسب الصف السادس والمادة رياضيات في الفصل الثالث

1	أسئلة الامتحان النهائي الورقي ريفيل
2	حل أسئلة الامتحان النهائي الالكتروني ريفيل
3	حل أسئلة الامتحان النهائي الالكتروني بريدج بالتفصيل
4	أسئلة الامتحان النهائي الالكتروني بريدج
5	أسئلة الامتحان النهائي الورقي بريدج

UNITED ARAB EMIRATES
MINISTRY OF EDUCATION

الإمارات العربية المتحدة
وزارة التربية والتعليم

Grade 6 Mainstream Mathematics (Reveal)
Scheme of Work, Term 3, Academic Year 2022-2023

Purpose
- to define the **required** Mainstream 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 eight teaching weeks, allowing the coverage of topics within each week to be flexible.

Assessment
- Assessment details for Term 3 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: April 17 – 21, 2023 (Ramadan ends ~April 20; Eid al-Fitr ~April 20 – 23)		
Module 8 – Area		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M8L1 – Area of Parallelograms *Explore: Area of Parallelograms*	• Understand how a parallelogram can be decomposed into a rectangle to find its area. • Use the area formula for a parallelogram to find areas or missing dimensions.	**6.G.1** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. **6.EE.2** Write, read, and evaluate expressions in which letters stand for numbers. **6.EE.2c** Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$.

Week 2: April 24 – 28, 2023		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M8L2 – Area of Triangles *Explore: Parallelograms and Area of Triangles* *Explore: Area of Triangles*	• Understand how a parallelogram can be decomposed into two congruent triangles to find the area of one triangle. • Use the area formula for a triangle to find areas or missing dimensions.	**6.G.1** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. **6.EE.2** Write, read, and evaluate expressions in which letters stand for numbers. **6.EE.2c** Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$.
M8L3 – Area of Trapezoids	• Understand how to find the area of a trapezoid by decomposing or composing and relate this to the area formula. • Use the area formula for a trapezoid to find areas or missing dimensions.	

Week 3: May 1 – 5, 2023		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M8L4 – Area of Regular Polygons *Explore: Area of Regular Polygons*	• Decompose a polygon into triangles, parallelograms, and trapezoids to find the area of the polygon.	**6.G.1** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. **6.EE.2** Write, read, and evaluate expressions in which letters stand for numbers. **6.EE.2c** Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$.
M8L5 – Polygons on the Coordinate Plane *Explore: Explore the Coordinate Plane*	• Graph the vertices of a polygon, draw the shape represented by the points, and then use the graphed polygon to find its area and perimeter.	**6.G.3** Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems. *Also addresses:* **6.G.1** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.

Week 4: May 8 – 12, 2023		
Module 9 – Volume and Surface Area		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M9L1 – Volume of Rectangular Prisms	• Find the volume of a rectangular prism by using unit cubes and by using the volume formula when given the length, width, and height of the prism.	**6.G.2** Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems. *Also addresses:* **6.EE.6** Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.
M9L2 – Surface Area of Rectangular Prisms *Explore: Cube Nets*	• Represent a rectangular prism with its net to find the surface area in mathematical and real-world contexts.	**6.G.4** Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.

Week 5: May 15 – 19, 2023		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M9L3 – Surface Area of Triangular Prisms *Explore: Non-Rectangular Prism Nets*	• Create a net to represent a triangular prism and use the net to find the surface area of the prism.	**6.G.4** Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.
M9L4 – Surface Area of Pyramids	• Represent a triangular or square pyramid with a net made up of squares and triangles, and then use that net to find the surface area of the given figure.	

Week 6: May 22 – 26, 2023		
Module 10 – Statistical Measures and Displays		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M10L1 – Statistical Questions *Explore: Collect Data*	• Understand that a statistical question anticipates a variety of responses.	**6.SP.1** Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.
M10L2 – Dot Plots and Histograms	• Use dot plots and histograms to display and analyze data.	**6.SP.4** Display numerical data in plots on a number line, including dot plots, histograms, and box plots. **6.SP.5** Summarize numerical data sets in relation to their context, such as by: **6.SP.5a** Reporting the number of observations.
M10L3 – Measures of Center *Explore: Mean*	• Use the measures of center to summarize a numerical data set with a single number. • Find a missing data value given the mean.	**6.SP.3** Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number. **6.SP.4** Display numerical data in plots on a number line, including dot plots, histograms, and box plots. **6.SP.5** Summarize numerical data sets in relation to their context, such as by: **6.SP.5a** Reporting the number of observations. **6.SP.5b** Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. **6.SP.5c** Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.

Week 7: May 29 – June 2, 2023		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M10L4 – Interquartile Range and Box Plots	• Understand how a measure of variation describes the variability of a data set with a single value. • Display a numerical data set in a box plot and summarize the data.	**6.SP.2** Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape. **6.SP.3** Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number. **6.SP.4** Display numerical data in plots on a number line, including dot plots, histograms, and box plots. **6.SP.5** Summarize numerical data sets in relation to their context, such as by: **6.SP.5a** Reporting the number of observations. **6.SP.5b** Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. **6.SP.5c** Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. **6.SP.5d** Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.
M10L5 – Mean Absolute Deviation	• Understand how the mean absolute deviation describes the variation in a data set and interpret its value within the context of a given real-world scenario.	
M10L6 – Outliers *Explore: Mean, Median, and Outliers*	• Understand how an outlier may affect a measure of center, and determine which measure of center is most appropriate to use when describing a data set that does or does not contain an outlier.	

Week 8: June 5 – 9, 2023		
Lessons	**Student Learning Outcomes**	**Common Core State Standards**
M10L7 – Interpret Graphical Displays *Explore: Interpret Box Plots*	• Determine the symmetry of data represented in different displays, determine the most appropriate measure of center and variation based on the symmetry, and use the measures to describe the data.	**6.SP.2** Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape. **6.SP.3** Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number. **6.SP.4** Display numerical data in plots on a number line, including dot plots, histograms, and box plots. **6.SP.5** Summarize numerical data sets in relation to their context, such as by: **6.SP.5a** Reporting the number of observations. **6.SP.5b** Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. **6.SP.5c** Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. **6.SP.5d** Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

Week 9: June 12 – 16, 2023 Week 10: June 19 – 23, 2023 Week 11: June 26 – 30, 2023
Term 3 Revision and End-of-Term Exam **Exam date to be determined by the Assessment Directorate**