Grade 08 General Stream 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 <u>recommend</u> 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 – Jan. 6, 2023						
CHAP NBR	CHAP TITLE	LESSON NBR	LESSON TITLE	Slo.EN		
Chapter 5	Triangles and Pythagorean Theorem المثلثات ونظرية فيثاغورث	Lab 1	Inquiry Lab : Parallel Lines مختبر الاستكشاف: المستقيمات المتوازية	Study the relations between angles when a secant cuts two parallel lines		
Chapter 5	Triangles and Pythagorean Theorem المثلثات ونظرية فيثاغورث	Lesson 1	Lines المستقيمات	Identify relationships of angles formed by two parallel lines cut by a transversal		
Chapter 5	Triangles and Pythagorean Theorem المثلثات ونظرية فيثاغورث	Lesson 2	Geometric Proof البرهان الهندسي	Write geometric proofs		

	Week 2: Jan. 9 – 13, 2023							
CHAP NBR	CHAP TITLE	LESSON NBR	LESSON TITLE	Slo.EN				
Chapter 5	Triangles and Pythagorean Theorem المثلثات ونظرية فيثاغورث	Lab 2	Inquiry Lab : Triangles مختبر الاستكشاف: المثلثات	Discover the relation between the angles of a triangle				
Chapter 5	Triangles and Pythagorean Theorem المثلثات ونظرية فيثاغورث	Lesson 3	Angles of Triangles زوایا المثلثات	Find missing angle measures in triangles.				
Chapter 5	Triangles and Pythagorean Theorem المثلثات ونظرية فيثاغورث	Lesson 4	Polygons and Angles المضلعات والزوايا	Find the sum of the angle measures of a polygon and the measure of one interior angle of a regular polygon.				
Chapter 5	Triangles and Pythagorean Theorem المثلثات ونظرية فيثاغورث	Problem-S	Problem-Solving Investigation: Look for a Pattern استقصاء حل المسائل: البحث عن نمط	Solve non-traditional problems using patterns				

Week 3: Jan. 16 – 20, 2023						
CHAP NBR	CHAP TITLE	LESSON NBR	LESSON TITLE	Slo.EN		
Chapter 5	Triangles and Pythagorean Theorem المثلثات ونظرية فيثاغورث	Lab 3	Inquiry Lab : Right Triangle Relationships مختبر الاستكشاف: علاقات المثلث القائم	Explore the relation between the sides of a right triangle		
Chapter 5	Triangles and Pythagorean Theorem المثلثات ونظرية فيثاغورث	Lesson 5	The Pythagorean Theorem نظرية فيثاغورث	Use the Pythagorean Theorem		
Chapter 5	Triangles and Pythagorean Theorem المثلثات ونظرية فيثاغورث	Lab 4	Inquiry Lab : Proofs About the Pythagorean Theorem مختبر الاستكشاف : براهين نظرية فيثاغورث	Prove Pythagoras' theorem and its converse		
Chapter 5	Triangles and Pythagorean Theorem المثلثات ونظرية فيثاغورث	Lesson 6	Use the Pythagorean Theorem استخدام نظرية فيثاغورث	Solve problems using the Pythagorean Theorem.		

Week 4: Jan. 23 – 27, 2023

CHAP NBR	CHAP TITLE	LESSON NBR	LESSON TITLE	Slo.EN
Chapter 5	Triangles and Pythagorean Theorem المثلثات ونظرية فيثاغورث	Lesson 7	Distance on the Coordinate Plane المسافة على المستوى الإحداثي	Find the distance between two points on the coordinate plane.
Chapter 6	Transformations التحويلات	Lab 1	Inquiry Lab : Translations مختبر الاستكشاف: التحويلات	Identify the properties of reflection and translation and
Chapter 6	Transformations التحويلات	Lesson 1	Translations الإزاحة	Graph translations on the coordinate plane.
Chapter 6	Transformations التحويلات	Lesson 2	Reflections الانعكاس	Graph reflections on the coordinate plane.

Week 5: Jan. 30 – Feb. 3, 2023						
CHAP NBR	CHAP TITLE	LESSON NBR	LESSON TITLE	SIo.EN		
Chapter 6	Transformations التحويلات	Problem-S	Problem-Solving Investigation: Act It Out استقصاء حل المسائل: مثلها بنفسك	Solve non-traditional problems by acting them out		
Chapter 6	Transformations التحويلات	Lab 2	Inquiry Lab : Rotational Symmetry مختبر الاستكشاف: التماثل الدوراني	Identify rotational symmetry		
Chapter 6	Transformations التحويلات	Lesson 3	Rotations الدوران	Graph rotations on the coordinate plane.		
Chapter 6	Transformations التحويلات	Lab 3	Inquiry Lab : Dilations مختبر الاستكشاف: التمدد	Explore the dilation properties with angles and sides		

Week 6: Feb. 6 – 10, 2023

CHAP NBR	CHAP TITLE	LESSON NBR	LESSON TITLE	Slo.EN	
Chapter 6	Transformations التحويلات	Lesson 4	Dilations عمليات تغيير الأبعاد/التمدد	Use scale factors to graph dilations.	
Chapter 7	Congruence and Similarity التطابق والتشابه	Lab 1	Inquiry Lab : Congruence and Transformations مختبر الاستكشاف: تركيب التحويلات	Explore transformations like translation and reflection and rotation	
Chapter 7	Congruence and Similarity التطابق والتشابه	Lesson 1	Congruence and Transformations التطابق والتحويلات	Use a series of transformations to create congruent figures	
Chapter 7	Congruence and Similarity التطابق والتشابه	Lab 2	Inquiry Lab : Investigate Congruent Triangles مختبر الاستكشاف: استكشاف المثلثات المتطابقة	Identify the rules to be used to investigate triangle congruence	

Week 7: Feb. 13 – 17, 2023						
CHAP NBR	CHAP TITLE	LESSON TITLE	Slo.EN			
Chapter 7	Congruence and Similarity التطابق والتشابه	Lesson 2	Congruence التطابق	Write congruence statements for congruent figures.		
Chapter 7	Congruence and Similarity التطابق والتشابه	Problem-S	Problem-Solving Investigation: Draw a Diagram استقصاء حل المسائل: تصميم رسم تخطيطي	Solve problems by drawing diagrams		
Chapter 7	Congruence and Similarity التطابق والتشابه	Lab 3	Inquiry Lab : Similar a Triangles مختبر الاستكشاف: المثلثات المتشابهة	Explore the properties of similar triangles		

	Week 8: Feb. 20 – 24, 2023						
CHAP NBR CHAP TITLE LESSON NBR LESSON TITLE SIo.EN							
Chapter 7	Congruence and Similarity التطابق والتشابه	Lesson 3	Similarity and Transformations التشابه والتحويلات	Use transformations to create similar figures			
Chapter 7	Congruence and Similarity التطابق والتشابه	Lesson 4	Properties of Similar Polygon خصائص المضلعات المتشابهة	Identify similar polygons and find missing measures of similar polygons.			
Chapter 7	Congruence and Similarity التطابق والتشابه	Lesson 5	Similar Triangles and Indirect Measurement المثلثات المتشابهة والقياس غير المباشر	Solve problems involving similar triangles			

Week 9: Feb. 27 – Mar. 3, 2023						
CHAP NBR CHAP TITLE LESSON NBR LESSON TITLE SIo.EN						
Chapter 7	Congruence and Similarity التطابق والتشابه	Lesson 6	Slope and Similar Triangles المثلثات المائلة والمتشابهة	Relate the slope of a line to similar triangles		
Chapter 7	Congruence and Similarity التطابق والتشابه	Lesson 7	Area and Perimeter of Similar Figures مساحة الأشكال المتشابهة ومحيطها	Find the relationship between perimeters and areas of similar figures		

W	/eek	10:	Mar.	6 –	10.	, 2023
---	------	-----	------	-----	-----	--------

Term 2 Revision/EOT Exams