

STREAMLINING THE K12 CURRICULUM: An Approach to Determining which K12 Standards and Competencies to Teach

> PEAC WEBINAR MATH JUNE 9, 2020



bjectives:

- Discuss the rationale and parts of the DepEd MELCs Curriculum Guide for SY 2020-2021
- Explain the process of streamlining K12 standards and competencies
- Relate the importance of alignment in streamlining with PEAC Recertification
- Apply the process to selected units of study in a subject area for curriculum mapping, identification of instructional materials and preparation of the unit calendar



IMPORTANT DATES

Release of Final Report for Schools Visited SY 2019-2020

Starts April 20, 2020

Final reports will be released by batch beginning with schools visited August 2019. Communication will be sent to schools once reports are available in their respective EIS accounts.

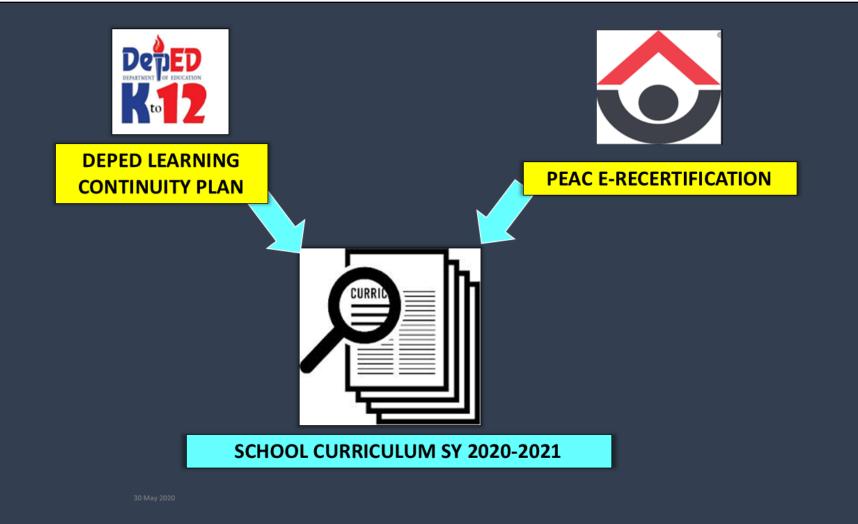
ESC Schools Due for Recertification

deadline of submission of requirements Part 1: September 1, 2020 Part 2: September 30, 2020

Schedule of E-Recertification November 2020-March 2021 Certification for SY 2020-2021 is suspended.

Go to https://peac.org.ph/certification/ for more details.

For inquiries, please contact the Certification Unit at certification@peac.org.ph or 0917.501.3669.



HOW WILL ESC SCHOOLS IN SY 2020-2021 PREPARE THE SCHOOL CURRICULUM?

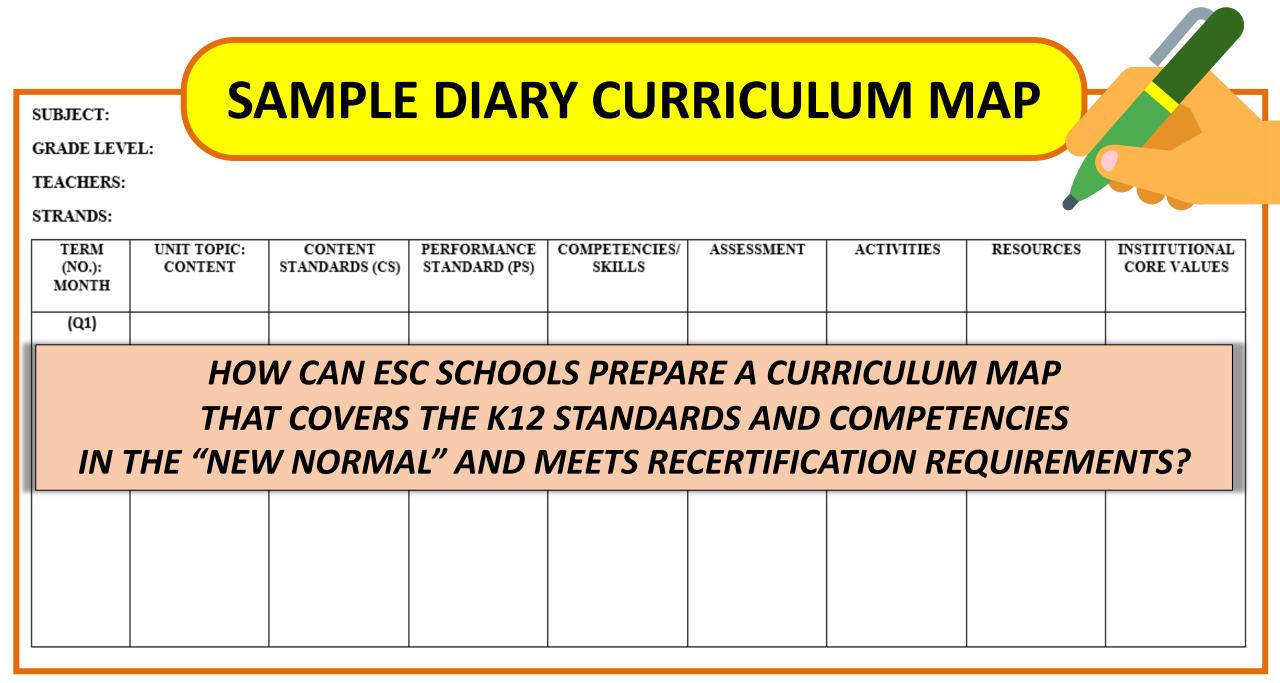
13 June 2020



TEACHERS:

STRANDS:

TERM (NO.): MONTH	UNIT TOPIC: CONTENT	CONTENT STANDARDS (CS)	PERFORMANCE STANDARD (PS)	COMPETENCIES/ SKILLS	ASSESSMENT	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
(Q1)								





"...releasing the MELCs does not downplay the standards set by the K to 12 curriculum guides. Rather, these serve as guide to teachers as they address the instructional needs of learners while ensuring that curriculum standards are maintained and achieved."

GUIDELINES ON THE USE OF THE MELCs, p. 2

"Tandaan na ang layunin sa pagbuo ng MELCs ay hindi upang palitan ang kasakuluyang curriculum guide kundi upang magabayan ang mga guro sa pagtukoy ng mga kompetensing mas kinakailangan ng mga mag-aaral sa Taong Panuruang 2020-2021. Sa huli, hinihikayat pa rin ang mga guro na Sumangguni sa curriculum guide ng Filipino kung sa tingin nilang hindi sapat ang mga kompetensing tinukoy sa MELCs. ."

FILIPINO BRIEFER, p. 33

Most Essential Learning Competencies

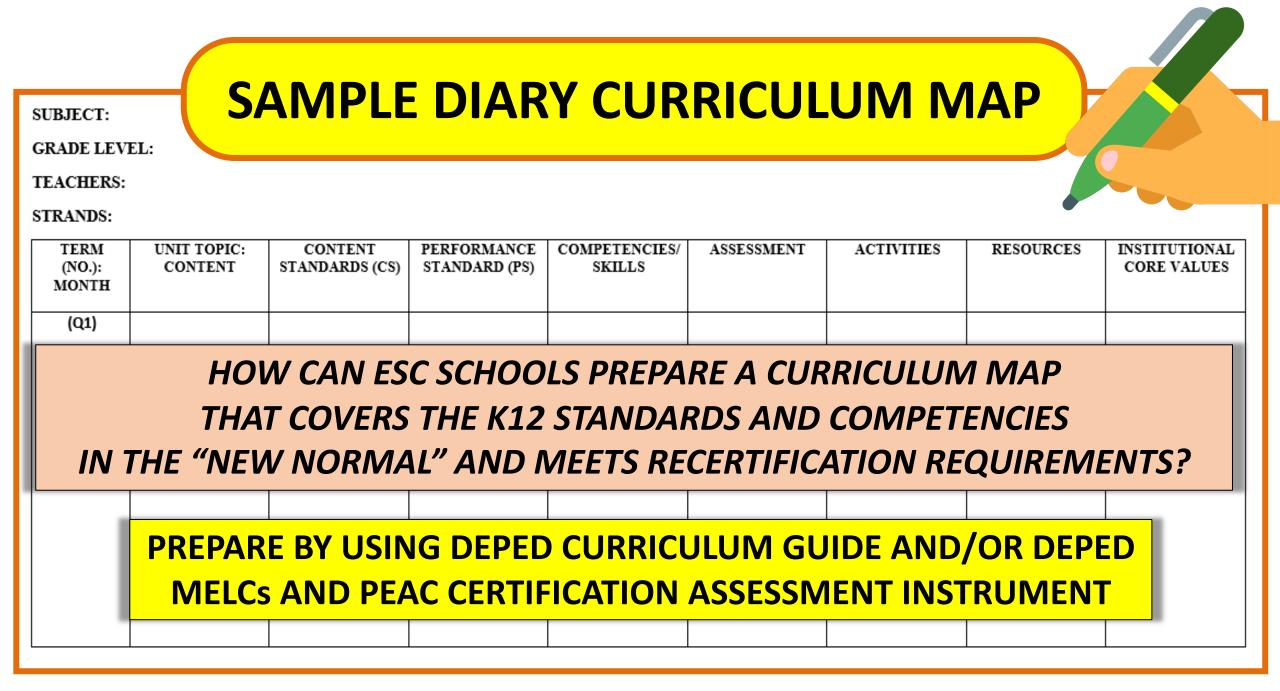
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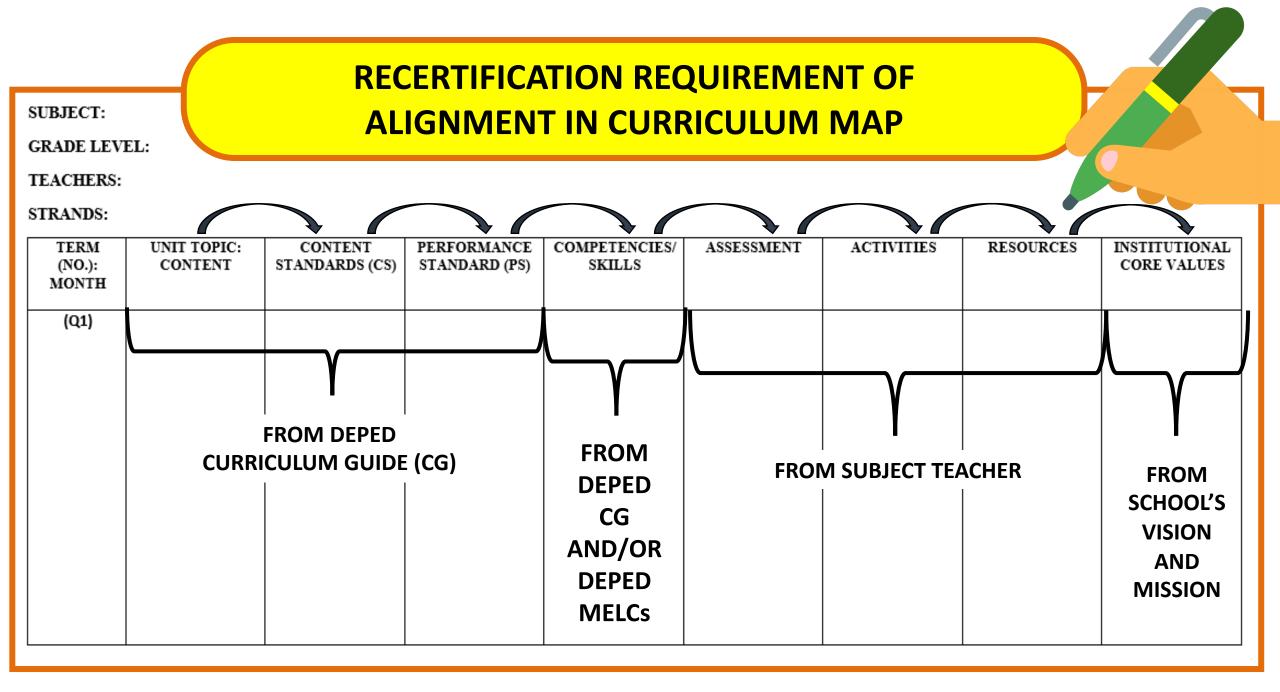
K to 12

PEAC CERTIFICATION ASSESSMENT INSTRUMENT

Standards of Compliance

1. A curriculum map in each subject area that:					
- is aligned with the philosophy, vision, mission, goals and objectives*	4	3	2	1	0
- is aligned with the Kto12 curriculum guides, standards and competencies*	4	3	2	1	0
- shows unpacked Kto12 standards and competencies in different ways in all subjects*	4	3	2	1	0
 shows horizontal alignment between standards, competencies, assessment, instruction and resources in all the learning units* 	4	3	2	1	0
- articulates vertical learning progressions across the different grade levels*	4	3	2	1	0
2. The implementation and continuous improvement of the curriculum maps by:					
 checking that the standards and competencies, activities and assessments and resources and integration of the PVMGO in the curriculum maps are reflected in the unit learning plans 	4	3	2	1	0
- conducting a periodic review, revision and updating of the curriculum maps	4	3	2	1	0

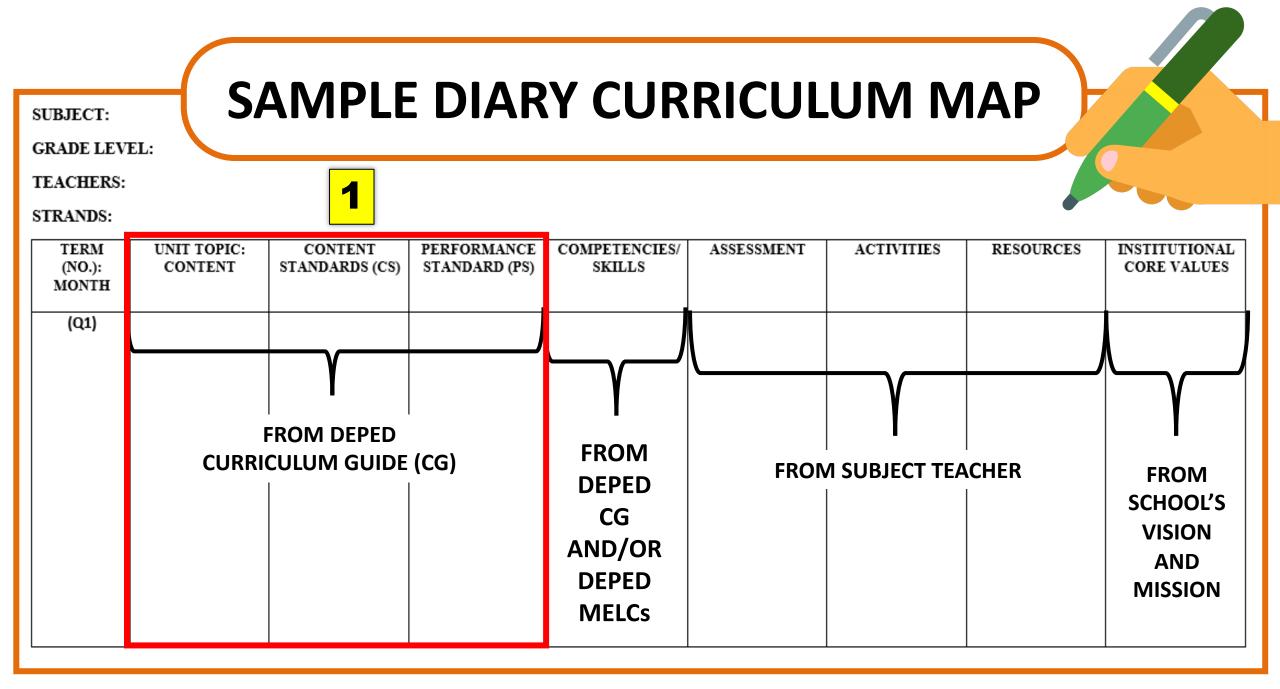




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Quarter	Content Standards	Performance Standards	Most Essential Learning competencies	Duration
	The learner	The learner	The learner	
	geometry of shapes and sizes, and geometric	accurately authentic problems involving sides and angles of a polygon	derives relationships of geometric figures using measurements and by inductive reasoning; supplementary angles, complementary angles, congruent angles, vertical angles, adjacent angles, linear pairs, perpendicular lines, and parallel lines.	Week 2
	relationships.		derives relationships among angles formed by parallel lines cut by a transversal using measurement and by inductive reasoning.	Week 3
			uses a compass and straightedge to bisect line segments and angles and construct perpendiculars and parallels.	Week 4
			illustrates polygons: (a) convexity; (b) angles; and (c) sides.	Week 5
			derives inductively the relationship of exterior and interior angles of a convex polygon.	Week 6
			illustrates a circle and the terms related to it: radius, diameter chord, center, arc, chord, central angle, and inscribed angle.	Week 7
			constructs triangles, squares, rectangles, regular pentagons, and regular hexagons.	Week 8
			solves problems involving sides and angles of a polygon.	Week 9
Q4	demonstrates understanding of key	is able to collect and organize data	poses real-life problems that can be solved by Statistics. formulates simple statistical instruments.	Week 1
	concepts, uses and	systematically and	gathers statistical data.	Week 2
	importance of	compute accurately	organizes data in a frequency distribution table.	Week 3
	Statistics, data collection/gathering	measures of central tendency and variability	uses appropriate graphs to represent organized data: pie chart, bar graph, line graph, histogram, and ogive.	Week 4 to !
	and the different forms of data	and apply these appropriately in data	illustrates the measures of central tendency (mean, median, and mode) of a statistical data.	Week 6
	representation,	analysis and	calculates the measures of central tendency of ungrouped and grouped data.	
	measures of central	interpretation in	illustrates the measures of variability (range, average deviation, variance, standard	Week 7
	tendency, measures of variability, and	different fields.	deviation) of a statistical data.	

draws conclusions from graphic and tabu

and variability

The K to 12 Basic Education Curriculum is standards-based. The

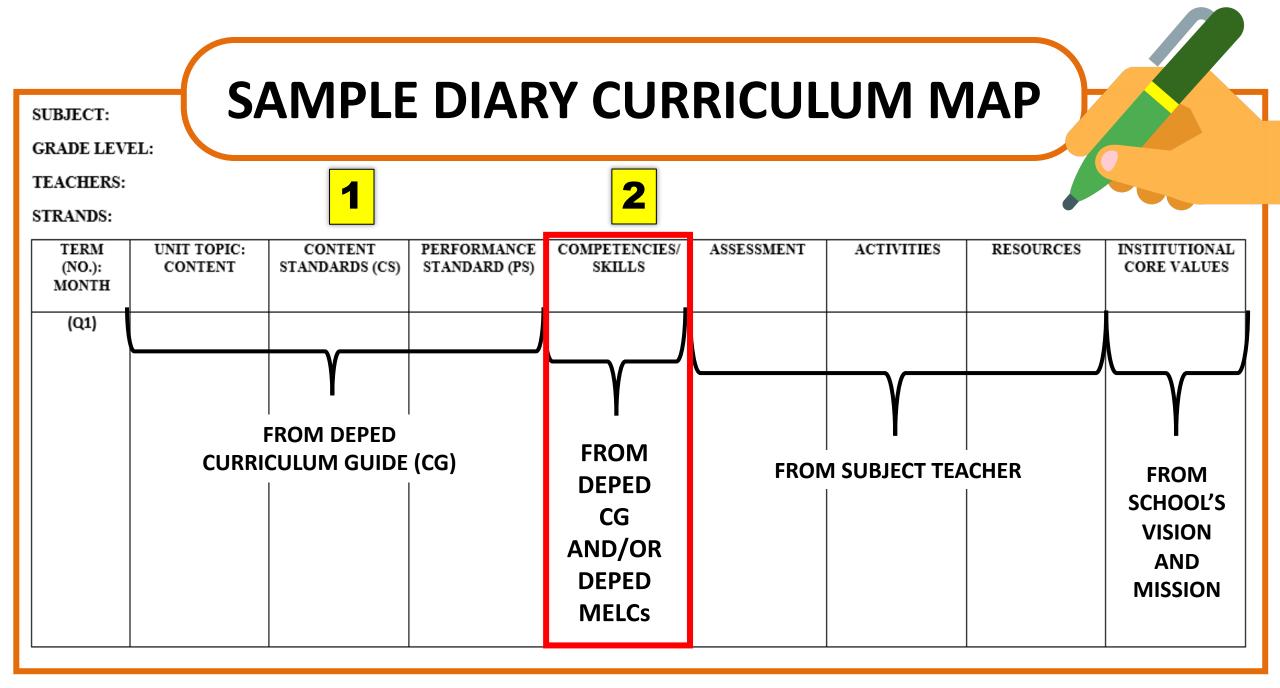
content standards cover a specified scope of sequential topics, identify and set the essential knowledge and understanding that must be learned. The performance standards describe the abilities and skills that the learners are expected to demonstrate in relation to the content standards.

MELCs: SCIENCE BRIEFER, p. 42

1				168
Quarter	Content Standards	Performance Standards	Most Essential Learning competencies	Duration
	The learner	The learner	The learner	
	geometry of shapes	accurately authentic	derives relationships of geometric figures using measurements and by inductive	Week 2
	and sizes, and	problems involving sides	reasoning; supplementary angles, complementary angles, congruent angles,	
	geometric	and angles of a polygon	vertical angles, adjacent angles, linear pairs, perpendicular lines, and parallel lines.	
	relationships.		derives relationships among angles formed by parallel lines cut by a transversal	Week 3
			using measurement and by inductive reasoning.	
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			chord, central angle, and inscribed angle.	
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Q4	demonstrates	is able to collect and	poses real-life problems that can be solved by Statistics.	Week 1
	understanding of key	organize data	formulates simple statistical instruments.	1
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	importance of	compute accurately	organizes data in a frequency distributio	
	Statistics, data	measures of central	uses appropriate graphs to represent of "The contel	at ar
	collection/gathering	tendency and variability	graph, histogram, and ogive.	IL dI
	and the different	and apply these	illustrates the measures of central tend	
	forms of data	appropriately in data	statistical data.	
	representation,	analysis and	calculates the measures of central tend	the
	measures of central	interpretation in	indicates the measures of variability (in	
	tendency, measures of variability, and	different fields.	deviation) of a statistical data.	
	probability.		calculates the measures of variability of	
	probability.		uses appropriate statistical measures in draws conclusions from graphic and tat	that
			draws conclusions from graphic and tab	liut
			and variability.	

"The content and performance standards are directly lifted from the curriculum guides. Its inclusion is to emphasize that the <u>identification of MELCs is</u> <u>anchored on the prescribed standards</u> and <u>not a</u> <u>departure from the standards-based basic</u> <u>education curriculum</u>. Thus, teachers are encouraged to refer to the 2016 Curriculum Guides in unpacking the MELCs."

GUIDELINES ON THE USE OF THE MELCs, p. 3



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	and the different forms of data	and apply these appropriately in data	illustrates the measures of central tendency (mean, median, and mode) of a statistical data.	Week 6
	representation,	analysis and	calculates the measures of central tendency of ungrouped and grouped data.	
	measures of central tendency, measures of variability, and	interpretation in different fields.	illustrates the measures of variability (range, average deviation, variance, standard deviation) of a statistical data. calculates the measures of variability of grouped and un	Week 7

ALIGNMENT OF STANDARDS-COMPETENCIES-ACTIVITIES

and variability

<u>These standards are further represented as</u> <u>learning competencies</u> which are the knowledge, skills and attitudes that students need to demonstrate in every lesson or learning activity.

MELCs: SCIENCE BRIEFER, p. 42

Characteristics of an Essential Learning Competency

Learning competency is ESSENTIAL if ...

- it is aligned with national, state, and/or local standards/ frameworks (eg: 'scientifically literate Filipinos').
- 2. it connects the content to higher concepts across content areas.
- competency is 3. it is applicable to real-life situations.
 - 4. If students left school after this grade, it would be important for them to have this competence above many others.
 - 5. it wouldn't be expected that most students would learn this through their parents/communities if not taught at school.

GUIDELINES ON THE USE OF THE MELCs, p. 2

MOST ESSENTIAL LEARNING COMPETENCIES MATRIX

K to 12 Curriculum



As the Department anticipates the challenges in employing various schemes in the delivery of the learning standards due to COVID19, the number of the identified essential learning competencies per quarter were further reduced, thus, the term **most essential learning competencies (MELCs)**.

GUIDELINES ON THE USE OF THE MELCs, p. 3

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TEPSA News

Serving Texas PreK-8 School Leaders January/February 2014 Vol. 71, No. 1 www.tepsa.org

Best Practices/Tom W. Many, Ed.D. and Ted Horrell

Prioritizing the Standards Using R.E.A.L. Criteria

"In the absence of an agreed-upon set of criteria for prioritizing the standards, educators will, out of necessity, make up their own." -Larry Ainsworth

Whether working in Texas, which has categorized the Essential Knowledge and Skills into readiness and supporting standards, or in the 46 states that adopted the Common Core, teachers routinely ask themselves the same questions: Are some standards more important than others? Which standards will students need in the next class, course or grade level? Will all the standards be tested?

During a recent team meeting teachers were given a sample unit plan and asked to 'identify what was important for students to learn' before an upcoming assessment. Teachers embraced the task but as they worked to identify the requisite standards for the upcoming unit, it became obvious that each individual was using their own unique criteria to prioritize what was essential for students to learn. The result was several different and competing sets of standards based on the contrasting views of individual teachers. Agreement on the unit's essential outcomes remained an elusive goal.

Larry Ainsworth argues that this experience is not unique to a single district, school at team. He suggests that "left to their rowing a voluminous number of student learning outcomes, educators naturally pick and choose those they know best, like best, the ones for which they have materials and lesson plans or activities, and those most likely to appear on state tests." Reaching consensus on a unit's essential outcomes is important but many teachers wonder where to begin the task of prioritizing an overwhelming number of standards.

Using the R.E.A.L. Criteria to Prioritize the Standards

In response to this dilemma, Ted Horrell and his colleagues in Shelby County, Tennessee have translated criteria first developed by Reeves and Ainsworth into an easy to remember acronym. Using the R.E.A.L. criteria (Readiness, Endurance, Assessed, and Leverage), teachers collaborate around whether a particular standard should be considered a priority. An example for each of the four categories is listed below.

Readiness: The 'R' stands for Readiness. This standard provides students with essential knowledge and skills necessary for success in the next class, course or grade level. Here is an example of a Pendiners standard

https://absenterprisedotcom.files.wordpress.com/2016/06/real-standards.pdf

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Algebra I Standard: *Manipulate formulas and solve literal equations.*

Student proficiency in this standard is necessary for success in subsequent math classes including Geometry and Algebra II. Students who cannot demonstrate these skills would not be ready to advance to the next level of instruction.

Endurance: The 'E' represents Endurance. This standard provides students with knowledge and skills that are useful beyond a single test or unit of study. Here is an example of an Endurance standard.

https://absenterprisedotcom.files.wordpress.com/2016/06/real-standards.pdf

English 9-10 Standard: Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.

This standard, in particular the skill of providing an objective summary of written passages, will be required for future high school and college courses. It is also likely to be an essential skill in many professions and in everyday life. he standard has a high degree of endurance.

Assessed: The 'A' represents Assessed. This standard will be assessed on upcoming state and national exams. Here is an example of a standard reflecting the Assessed criteria.

Algebra I Standard: Order and classify rational numbers.

Although ordering numbers is a vital part of the math curriculum that most students master at an early age, classifying rational numbers is a skill that is not an essential building block for understanding future concepts, nor does it have much practical application outside of the math curriculum. However, there are questions on the ACT and PSAT that require students to use this specific skill—a fact that would have to be considered when prioritizing this standard.

Leverage: The 'L' corresponds to Leverage. This standard will provide students with the knowledge and skills that will be of value in multiple disciplines. Here is an example of a standard reflecting the Leverage criteria.

Physical Science Standard: Choose, construct, and analyze appropriate graphical representations for a data set.

Though it is part of the physical science curriculum, this standard has significant leverage. Students will be expected

which promotes development of better assessments and helps identify which students will need more time and support. This kind of knowledge fosters more efficient planning and more efficient sharing of resources.

Prioritizing the standards also encourages teachers to embrace more effective instructional practices by reducing the pressure to simply cover the material. According to Ainsworth, "the consensus among educators nationwide is that in-depth instruction of 'essential' concepts and skills is more effective than superficially 'covering' every concept in the textbook."

Perhaps the biggest argument in favor of prioritizing standards is the positive effect the process has on sharpening the pedagogy and deepening the content knowledge of teachers. Teams who prioritize the standards recognize that in many ways, the process is as important as the product. Carefully analyzing the standards, debating the merits of individual standards, and coming to consensus on the most essential standards helps everyone gain a more thorough understanding of what teachers should teach and student should learn.

If Everything is Important, Then Nothing is Important

To paraphrase the famous quote, "if everything is a priority, then nothing is a priority." The question is not whether teachers will prioritize the standards but how will teachers prioritize the standards. Will teachers use a unique set of criteria formed by individuals working in isolation or will they prioritize the standards based upon a common and agreed upon set of criteria developed collaboratively while working as a team?

The answer is to embrace our collective responsibility, decide together what is most important for students to know and be able to do, and prioritize our teaching around the most important things. Insisting teams collaboratively prioritize the standards using R.E.A.L. criteria provides an important leverage point for principals.

https://absenterprisedotcom.files.wordpress.com/2016/06/real-standards.pdf

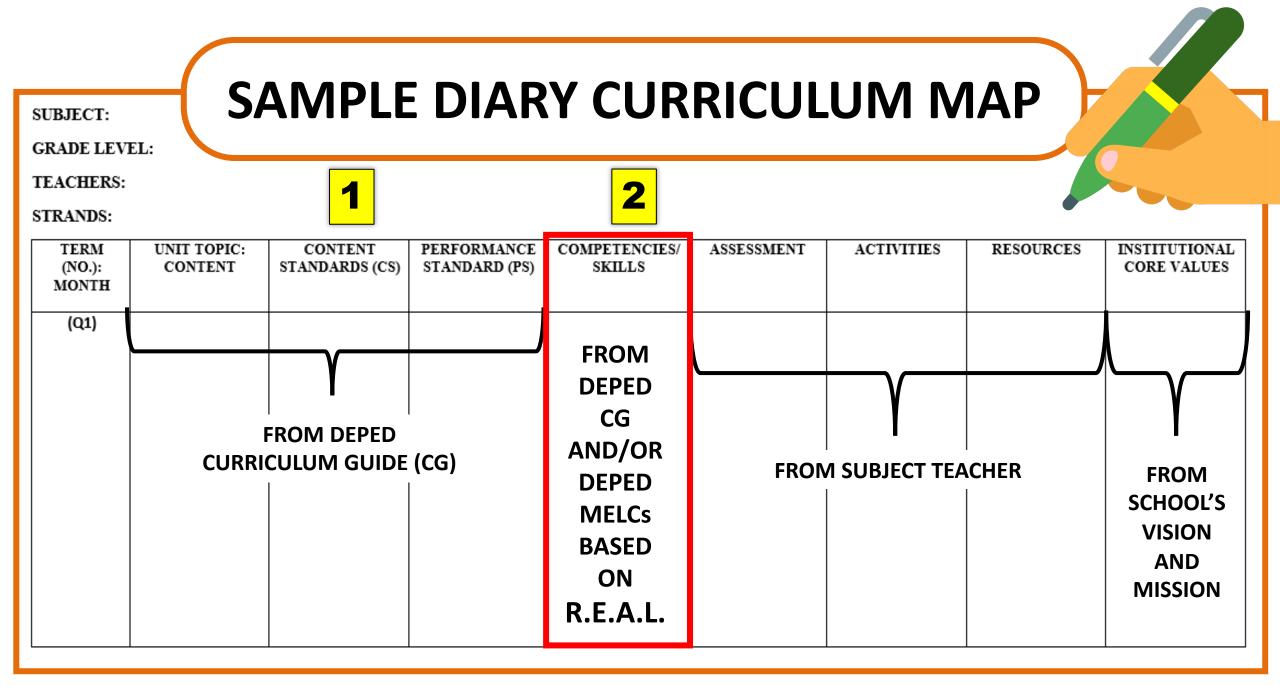


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TRANSFER OF LEARNING TO REAL LIFE

In determining the most essential learning competencies, the Department collaborated with stakeholders from the Assessment Curriculum and Technology Research Centre (ACTRC), during which the descriptor – **ENDURANCE** – was considered the primary determining factor. A learning competency is considered enduring if it remains with learners long after a test or unit of study is completed or if it is useful beyond a single test or unit of study. Examples of such learning competencies include research skills, reading comprehension, writing, map reading, and hypothesis testing, which are essential in many professions and in everyday life (Reeves, 2002; Many & Horrell, 2014).

Certification Assessment Instrument

IN THE LEARNING PLAN, WE WILL SEE...

3. Learning plans in each subject area that show:

- use of and alignment with curriculum standards*
- a systematic and progressive development of students' skills resulting in understanding and culminating in transfer of learning*
- use of varied research-based and learner-centered strategies in the classroom for active and engaged student learning*
- incorporation of the philosophy, vision-mission, teaching of the 21st century skills, the use of real world situations, inter-subject integration and use of technology*
- provisions of different activities that are sensitive to and address the learners' varied interests and learning styles
- selection and use of appropriate instructional resources that are aligned with the curriculum maps, standards and competencies

Standards stated at start of plan.

Procedures related to A, M, and T. Plan ends with Performance Task.

Activities and strategies done in procedures describe student actions more than teacher actions. Less teacher talk, more student interaction.

- Values integration with Vision-Mission
- Activities and questions related to 7Cs
- Activities and questions related to social issues
 and community events
- Activities and questions connecting to other subjects
- Use of multimedia and other apps to present lesson or produce student output

Activities that are differentiated or show use of multiple intelligences; choice in roles or products in performance task

Activities that are differentiated or show use of multiple intelligences; student choice in roles or products in performance task





Since Transfer of Learning to Real Life is emphasized in MELCs, how do we ensure its achievement in the curriculum design?

3 June 2020

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ENSURE ENDURANCE OR TRANSFER OF LEARNING BY DOING ANY OF THE FF. WITH MELCs:

- 1. Unpack into sub-competencies/tasks
- 2. Repeat in another unit or grade level
- 3. Follow-up in higher grade levels
- 4. Cluster with other competencies
- 5. Merge with other competencies and rephrase
- 6. Focus on skill rather than on content
- 7. Align with unit performance standard

1. UNPACK MELCs INTO SUB-COMPETENCIES (ENGLISH)

۱		26
G7 Q4	Employ a variety of strategies for effective interpersonal communication (interview, dialog, conversation)	Determine the tone and mood of the speaker or characters in the narrative listened to Use different listening strategies based on purpose, topic and levels of difficulty of simple informative and short narrative texts Determine the intentions of speakers by focusing on their unique verbal and non- verbal cues Predict the outcomes of a verbal exchange listened to and their possible effects on the speakers Listen for important points signalled by volume, projection, pitch, stress, intonation, juncture, and rate of speech

The sub-competencies listed above are only some of the LCs subsumed by the MELCs. The teacher may include more or less than those identified depending on the needs of the learners. Teachers are given the leeway to formulate learning objectives deemed necessary for their students' cognitive development as long as they adhere to the existing curriculum standards prescribed by the Department of Education.

2. REPEAT MELCs IN ANOTHER LEVEL FOR REINFORCEMENT (MATH)

Grade Level/Quarter	MELCs
Grade 1 (Quarter 3)	determines the missing term/s using one attribute in a given continuous pattern (letters/numbers/events) and in a given repeating pattern (letters, numbers, colors, figures, sizes, etc.).
Grade 2 (Quarter 3)	determines the missing term/s in a given continuous pattern using two attributes (any two of the following: figures, numbers, colors, sizes, and orientations, etc.) e.g. 1, A, 2,B,3,C,
Grade 3 (Quarter 3)	determines the missing term/s in a given combination of continuous and repeating pattern. e.g. 4A,5B, 6A,7B,

3. FOLLOW-UP MELCS IN HIGHER GRADE LEVELS (MATH)

KEY STAGE	Retained LC	Deleted LC	Justification
1	M4NS-IIe-80 changes improper fraction to mixed numbers and vice versa	M4NS-lie-79.2 identifies proper fractions, improper fractions, and mixed numbers.	The deleted competency was already taken up in the previous grade levels and can be covered by the retained competency.
2	M5NS-Ih-92.1 solves routine or non- routine problems involving multiplication without or with addition or subtraction of fractions and whole numbers using appropriate problem solving strategies and tools	M5NS-Ih-93.1 creates problems (with reasonable answers) involving multiplication of fractions	The deleted competency can be incorporated with the retained competency as enrichment.
3	M7NS-If-1 performs operations on rational numbers	M7NS-Ie-2 arranges rational numbers on a number line	The deleted competency is subsumed in the retained competency.
	13 June 2020		

4. CLUSTER WITH OTHER COMPETENCIES (MATH)

Grade 6, Quarter 2				
Learning Competencies	Comments/ Recommendations	Identified MELCs		
Sets up proportions for groups of objects or numbers and for given situation	Omitted			
Identifies real-life situations that make use of integers	Clustered and Rephrased	Describes the set of integers and identify real-life		
Describes the set of integers		situations that make use of it		
Represents integers on the number line	LC is subsumed to the next LC			
Compares and arranges integers		integers on the number line		
13 June 2020				

5. MERGE WITH OTHER COMPETENCIES AND REPHRASE (MATH)

Grade 8, Quarter 2				
Learning Competencies	Comments/ Recommendations	Identified MELCs		
Illustrates linear equations in two variables	Clustered and Rephrased	Illustrates and graphs linear equations in two variables		
Graphs linear equations in two variables				
Illustrates a linear function				
Graphs a linear function and its (a) domain; (b) range; (c) table of values; (d) intercepts; and (e) slope	Clustered and Rephrased	Graphs and illustrates a line function and its (a) domai (b) range; (c) table values; (d) intercepts; and (slope		

6. FOCUS ON SKILL RATHER THAN CONTENT (MATH)

Grade 5.	Quarter 1
MATH CG	REPHRASED
Multiplication, Division, Addition,	performs a series of more than two operations on whole numbers applying Parenthesis, Multiplication, Division, Addition, Subtraction (PMDAS) or Grouping, Multiplication, Division, Addition, Subtraction (GMDAS) correctly
simplifies a series of operations on whole numbers involving more than two operations using the PMDAS or GMDAS rule	

7. ALIGN WITH UNIT PERFORMANCE STANDARD

Quarter	Content Standards	Performance Standards The learner	Most Essential Learning competencies	Duration	K to 12 CG Code
Q3	demonstrates understanding of key concepts of axiomatic structure	1. is able to formulate an organized plan to have a real- life uation.	describes a mathematical system. illustrates the need for an axiomatic structure of a mathematical system in general, and in Geometry in p tices: (a) defined terms; (b) undefined terms; (c) pc ulates; and (d) theorems.	Week 1 to 2	M8GE-IIIa-1 M8GE-IIIa-c-1
	of geometry and triangle congruence.	2. is able to communication mathematication thinking with coherection clarit formating, involving, and some real-life problems involving congruent triangles using appropriate and accurate representations.	illustrates triangle congruence. illustrates the SAS, ASA and SSS congruence postulates. solves corresponding parts of congruent triangles proves two triangles are congruent. proves statements on triangle congruence. 2 applie: triangle congruence to construct perpendicular lines and angle bisectors.	Week 3 to 4 Week 5 Week 6 Week 7 Week 8 to 9	M8GE-IIId-1 M8GE-IIId-e-1 M8GE-IIIg-1 M8GE-IIIg-1 M8GE-IIIh-1 M8GE-IIIi-j-1

ALIGNMENT OF STANDARDS AND COMPETENCIES?

3 June 2020

7. ALIGN WITH UNIT PERFORMANCE STANDARD

Quarter	Content Standards	Performance Standards The learner	Most Essential Learning competencies	Duration	K to 12 CG Code
Q3	demonstrates understanding of key concepts of axiomatic structure	1. is able to formulate an organized plan to have a real- life suation.	describes a mathematical system. illustrates the need for an axiomatic structure of a mathematical system in general, and in Geometry in p tices: (a) defined terms; (b) undefined terms; (c) p ulates; and (d) theorems.	Week 1 to 2	M8GE-IIIa-1 M8GE-IIIa-c-1
	of geometry and triangle congruence.	2. is able to communication nathematication thinking with coherec- clarit formating, arraing, and soming real-life problems involving congruent triangles using appropriate and accurate representations.	illustrates triangle congruence. illustrates the SAS, ASA and SSS congruence postulates. solves corresponding parts of congruent triangles proves two triangles are congruent. proves statements on triangle congruence. applies triangle congruence to construct perpendicular lines and angle bisectors.	Week 3 to 4 Week 5 Week 6 Week 7 Week 8 to 9	M8GE-IIId-1 M8GE-IIId-e-1 M8GE-IIIg-1 M8GE-IIIh-1 M8GE-IIIh-1 M8GE-IIIi-j-1

WILL THIS ALIGNMENT LEAD TO ENDURANCE OR TRANSFER?

3 June 2020

ALIGNMENT OF STANDARDS AND COMPETENCIES

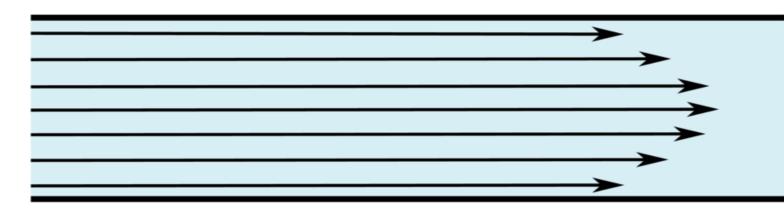
Q3	demonstrates	1. is able to	describes a mathematical system.	Week 1 to 2	M8GE-IIIa-1
	understanding of key	formulate an	illustrates the need for an axiomatic structure of a		M8GE-IIIa-c-1
	concepts of	organized plan	mathematical system in general, and in Geometry in		
	axiomatic structure	to ha life a real-	tices: (a) defined terms; (b) undefined terms; (c)		
		life uation.	pe ylates; and (d) theorems.		
	of geometry and	2. is able to	illustrates riangle congruence.	Week 3 to 4	M8GE-IIId-1
	triangle congruence.	communicat	illustrates the SAS, ASA and SSS congruence postulates.		M8GE-IIId-e-1
		nathematical	solves corresponding parts of congruent triangles	Week 5	M8GE-IIIf-1
		thinking with 🔪	proves two triangles are congruent.	Week 6	M8GE-IIIg-1
		cohere	proves statements on triangle congruence.	Week 7	M8GE-IIIh-1
		clarit for: ating.		Week 8 to 9	M8GE-IIIi-j-1
		for iting, inv gating,			
		ar ing, and	2		
		som great-life			
		problems	applies triangle congruence to construct perpendicular lines		
		involving	and angle bisectors.		
		congruent			
		triangles using			
		appropriate and			
		accurate			
		representations.			

Given these gaps, how do we align standards and competencies to ensure transfer to real life or endurance for lifelong learning? What process can be done?

STREAMLINING THE TEACHING AND LEARNING OF THE K12 CURRICULUM

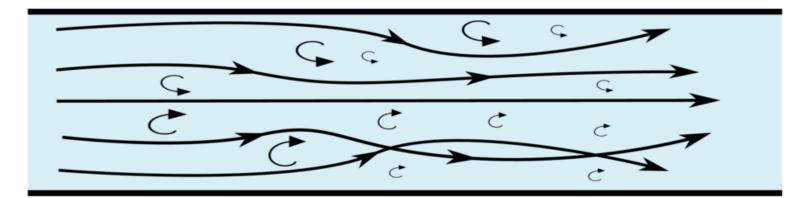
RAPATAN2020

laminar flow



Fluid particles follow a smooth path in layers or laminae with each layer moving parallel to each other without mixing; has visible stream lines

turbulent flow



Fluid particles move in a rough path and there are cross-currents and mixing of layers; has swirling zones

https://www.britannica.com/science/streamlining#ref54495

RΔΡΔΤΔΝ2020

turbulent flow

	Content Standards	Performance	Most Essential Learning competencies	Duration	K to 12 CG Code
		Standards			
	The learner	The learner	The learner		
	The learner	The learner	THE ISAI DEL		
Q3	demonstrates	1. is able to	describes a mathematical system.	Week 1 to 2	M8GE-IIIa-1
	understanding of key	formulate an	illustrates the need for an axiomatic structure of a		M8GE-IIIa-c-1
	concepts of	organized plan	mathematical system in general, and in Geometry in		
	axiomatic structure	to ha life a real-	tice: (a) defined terms; (b) undefined terms; (c)		
		life uation.	pendates; and (d) theorems.		
	d and a set			March Black	ALCOST MILLS
	of geometry and	2. is able to	illustrates riangle congruence.	Week 3 to 4	M8GE-IIId-1
	triangle congruence.	communicat	illustrates the SAS, ASA and SSS congruence postulates.		M8GE-IIId-e-1
		nathematical	solves corresponding parts of congruent triangles	Week 5	M8GE-IIIf-1
		thinking with 🔪	proves two triangles are congruent.	Week 6	M8GE-IIIg-1
		cohere	proves statements on triangle congruence.	Week 7	M8GE-IIIh-1
		clarit		Week 8 to 9	M8GE-IIII-j-1
		for sting,			
		inv gating,			
		ar ing, and			
		som great-life			
		problems	applies triangle congruence to construct perpendicular lines		
		involving	and angle bisectors.		
		congruent	and angle disectors.		
		triangles using			
		appropriate and			
		accurate			
		representations.			

laminar flow

>

UNIT TOPIC: CONTENT	CONTENT STANDARDS (CS)	PERFORMANCE STANDARD (PS)	COMPETENCIES/ SKILLS	ASSESSMENT	ACTIVITIES	RESOURCES
CONGRUENT TRIANGLES	The learner demonstrates understanding of key concepts of axiomatic structure of geometry and triangle congruence	The learner 1.is able to formulate an organized plan to handle a real-life situation. 2. is able to communicate mathematical thinking with coherence and clarity in formulating, investigating, analyzing, and solving real-life problems involving congruent triangles using appropriate and accurate representations.	 A.8 Solves corresponding parts of congruent triangles A.13 generalizes the importance of triangle congruence in real-life structures A.15 investigates real-life structures using triangle congruence A.16 communicate mathematical thinking with coherence and clarity 	A.8. Problem Solving A.13 Guided Generalization A.15. Performance Task A.16 Performance Task	A.8. Worksheet A.13. CER (Pinwheel Discussion) A.15. Scaffold for Transfer A.16. Scaffold for Transfer	A. 8. Textbook Online Resource A.13 Textbook Online Resource A.15 Online Resource A.16 Online Resource

ΒΔΡΔΤΔΝ2020

laminar flow

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STREAMLINING IS NOT SIMPLY
REDUCING COMPETENCIES;
IT IS ESTABLISHING
ALIGNMENTS BETWEEN
STANDARDS,
COMPETENCIES,
ASSESSMENTS, ACTIVITIES,
AND RESOURCES

UNIT TOPIC: CONTENT	CONTENT STANDARDS (CS)	PERFORMANCE STANDARD (PS)	COMPETENCIES/ SKILLS	ASSESSMENT	ACTIVITIES	RESOURCES
CONGRUENT TRIANGLES	The learner demonstrates understanding of key concepts of axiomatic structure of geometry and triangle congruence	The learner 1.is able to formulate an organized plan to handle a real-life situation. 2. is able to communicate mathematical thinking with coherence and clarity in formulating, investigating, analyzing, and solving real-life problems involving congruent triangles using appropriate and accurate representations.	A.8 Solves corresponding parts of congruent triangles A.13 generalizes the importance of triangle congruence in real-life structures A.15 investigates real-life structures using triangle congruence A.16 communicate mathematical thinking with coherence and clarity	A.8. Problem Solving A.13 Guided Generalization A.15. Performance Task A.16 Performance Task	A.8. Worksheet A.13. CER (Pinwheel Discussion) A.15. Scaffold for Transfer A.16. Scaffold for Transfer	A. 8. Textbook Online Resource A.13 Textbook Online Resource A.15 Online Resource A.16 Online Resource

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laminar flow							
 BENEFITS OF STREAMLINING: CLARITY OF PROCESS EFFICIENCY IN TEACHING FOCUS ON SKILL SCAFFOLDED SKILLS DEVELOPMENT EVIDENCE OF LEARNING 	UNIT TOPIC: CONTENT CONGRUENT TRIANGLES	CONTENT STANDARDS (CS) The learner demonstrates understanding of key concepts of axiomatic structure of geometry and triangle congruence	PERFORMANCE STANDARD (PS) The learner 1.is able to formulate an organized plan to handle a real-life situation. 2. is able to communicate mathematical thinking with coherence and clarity in formulating, investigating, analyzing, and solving real-life problems involving congruent triangles using appropriate and accurate representations.	COMPETENCIES/ SKILLS A.8 Solves corresponding parts of congruent triangles A.13 generalizes the importance of triangle congruence in real-life structures A.15 investigates real-life structures using triangle congruence A.16 communicate mathematical thinking with coherence and clarity	ASSESSMENT A.8. Problem Solving A.13 Guided Generalization A.15. Performance Task A.16 Performance Task	ACTIVITIES A.8. Worksheet A.13. CER (Pinwheel Discussion) A.15. Scaffold for Transfer A.16. Scaffold for Transfer	RESOURCES A. 8. Textbook Online Resource A.13 Textbook Online Resource A.15 Online Resource A.16 Online Resource

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PEAC CERTIFICATION ASSESSMENT INSTRUMENT

Standards of Compliance

1. A curriculum map in each subject area that:					
- is aligned with the philosophy, vision, mission, goals and objectives*	4	3	2	1	0
- is aligned with the Kto12 curriculum guides, standards and competencies*	4	3	2	1	0
 shows unpacked Kto12 standards and competencies in different ways in all subjects* 	4	3	2	1	0
 shows horizontal alignment between standards, competencies, assessment, instruction and resources in all the learning units* 	4	3	2	1	0
- articulates vertical learning progressions across the different grade levels*	4	3	2	1	0
2. The implementation and continuous improvement of the curriculum maps by:			· · · ·		
- checking that the standards and competencies, activities and assessments and resources and integration of the PVMGO in the curriculum maps are reflected in the unit learning plans	4	3	2	1	0
- conducting a periodic review, revision and updating of the curriculum maps	4	3	2	1	0

Q3	demonstrates	1. is able to	describes a mathematical system.	Week 1 to 2	M8GE-IIIa-1
	understanding of key	formulate an	illustrates the need for an axiomatic structure of a	1	M8GE-IIIa-c-1
	concepts of	organize pian	mathematical system in general, and in Geometry in		
	axiomatic structure	to ha , ie a real-	tice: (a) defined terms; (b) undefined terms; (c)		
		life uation.	pe slates; and (d) theorems.		
	of geometry and	2. is able to	illustrates triangle congruence.	Week 3 to 4	M8GE-IIId-1
	triangle congruence.	communicat	illustrates the SAS, ASA and SSS congruence postulates.		M8GE-IIId-e-1
		nathematical	solves corresponding parts of congruent triangles	Week 5	M8GE-IIIf-1
		hinking with	proves two triangles are congruent.	Week 6	M8GE-IIIg-1
		cohere	proves statements on triangle congruence.	Week 7	M8GE-IIIh-1
		clarit for ating, im gating, ar ing, and somme real-life problems involving congruent triangles using	applie: triangle congruence to construct perpendicular lines and angle bisectors.	Week 8 to 9	M8GE-IIIi-j-1
		appropriate and accura			
			INAR OR TURBULENT FLOW?		

ALIGNMENT OF STANDARDS AND COMPETENCIES

.3 June 2020

STREAMLINING BY:

TECHNIQUE A. ALIGNING CONTENT STANDARD AND COMPETENCIES WITH PERFORMANCE STANDARD

TECHNIQUE B. IDENTIFYING POWER AND SUPPORTING COMPETENCIES AND CLUSTERING THESE

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TABLE OF CONTENTS	Edukasyon sa Pagpapakatao ^{Grade 1} 53 - 56	Filipino Briefer 119 - 1
Briefer 9 - 10 Kindergarten 11 - 21	Grade 1 53 - 56 Grade 2 56 - 59 Grade 3 59 - 62 Grade 4 62 - 65 Grade 5 65 - 69 Grade 6 69 - 70 Grade 7 71 - 77 Grade 8 78 - 84 Grade 9 84 - 92 Grade 10 93 - 99	Grade 1 122 - 1 Grade 2 124 - 1 Grade 2 124 - 1 Grade 3 126 - 1 Grade 4 129 - 1 Grade 5 134 - 1 Grade 6 137 - 1 Grade 7 139 - 1 Grade 8 142 - 1 Grade 9 146 - 1 Grade 10 152 - 1
Araling Panlipunan	English Briefer 101 - 105	Mathematics Briefer
Grade 1 25 - 27 Grade 2 27 - 29 Grade 3 29 - 31 Grade 4 32 - 33 Grade 5 34 - 36 Grade 6 36 - 39 Grade 7 39 - 41 Grade 8 42 - 44 Grade 9 44 - 46	Grade 1 106 Grade 2 107 - 108 Grade 3 108 - 110 Grade 4 110 - 111 Grade 5 111 - 112 Grade 6 112 - 113 Grade 7 113 - 114 Grade 8 114 - 115 Grade 9 115 - 116 Grade 10 116 - 117	In dete Depar Currice

ALIGNMENT WITH PERFORMANCE STANDARD

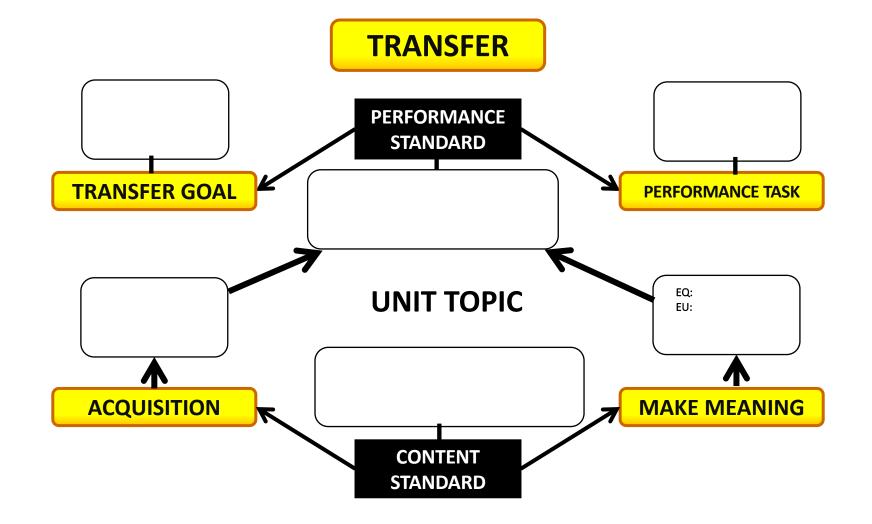
In determining the most essential learning competencies, the Department collaborated with stakeholders from the Assessment Curriculum and Technology Research Centre (ACTRC), during which the descriptor **/ ENDURANCE – was considered the primary determining factor.** A learning competency is **considered enduring if it remains with learners long after a test or unit of study is completed or if it is useful beyond a single test or unit of study.** Examples of such learning competencies include research skills, reading comprehension, writing, map reading, and hypothesis testing, which are essential in many professions and in everyday life (Reeves, 2002; Many & Horrell, 2014).

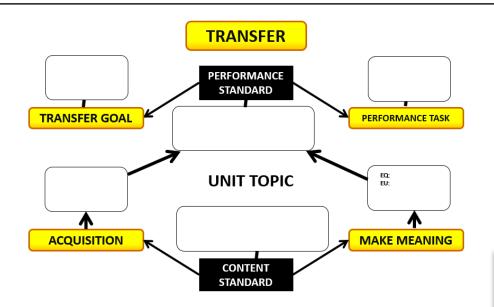
121

124 126

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TECHNIQUE A. ALIGNING CONTENT STANDARD AND COMPETENCIES WITH PERFORMANCE STANDARD





TECHNIQUE A: ALIGNING CONTENT STANDARD AND COMPETENCIES WITH PERFORMANCE STANDARD

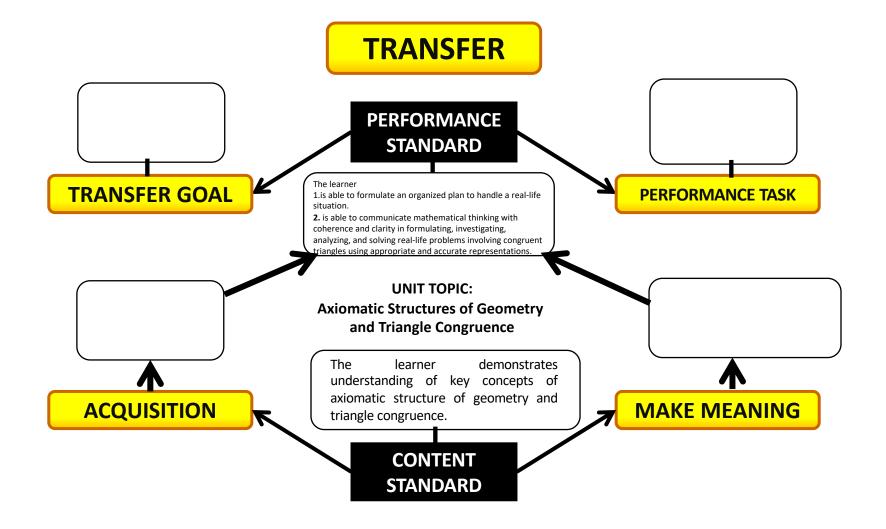
STEPS:

- **1.** Copy the Content and Performance Standards and write Unit Topic.
- 2. Unpack the Transfer Goal and Performance Task from Performance Standard. Then write in diagram.
- 3. Review DepEd CG/School Curriculum Map and take out competencies that are not directly aligned with Performance Standard. These competencies may already have been taught or may be taught in another grade or unit.
- 4. Classify the remaining unit competencies in terms of AMT Learning Goals. A & M with Content and T with Performance Standard. Unpack when needed.
- 5. Unpack the EQ and EU and with M cluster of competencies, establish link with Content Standard and Performance Task.
- 6. Cluster the A competencies and establish link with Content Standard and Performance Task.
- 7. Determine assessments for A (QA type) and M (WW type).

STEP 1: Copy the Content and Performance Standards and write the Unit Topic.

Quarter	Content Standards	Performance Standards	Most Essential Learning competencies	Duration	K to 12 CG Code
	The learner	The learner	The learner		
Q3	demonstrates	1. is able to	describes a mathematical system.	Week 1 to 2	M8GE-IIIa-1
	understanding of key	formulate an	illustrates the need for an axiomatic structure of a		M8GE-IIIa-c-1
	concepts of	organized plan	mathematical system in general, and in Geometry in		
	axiomatic structure	to handle a real-	particular: (a) defined terms; (b) undefined terms; (c)		
		life situation.	postulates; and (d) theorems.		
-	of geometry and	2. is able to	illustrates triangle congruence.	Week 3 to 4	M8GE-IIId-1
	triangle congruence.	communicate	illustrates the SAS, ASA and SSS congruence postulates.		M8GE-IIId-e-1
		mathematical	solves corresponding parts of congruent triangles	Week 5	M8GE-IIIf-1
		thinking with	proves two triangles are congruent.	Week 6	M8GE-IIIg-1
		coherence and	proves statements on triangle congruence.	Week 7	M8GE-IIIh-1
		clarity in		Week 8 to 9	M8GE-IIIi-j-1
		formulating,			
		investigating,			
		analyzing, and			
		solving real-life			
		problems	applies triangle congruence to construct perpendicular lines		
		involving	and angle bisectors.		
		congruent			
		triangles using			
		appropriate and			
		accurate			
		representations.			

STEP 1: Copy the Content and Performance Standards and write the Unit Topic.



PERFORMANCE STANDARD

The learner

- 1. is able to formulate an organized plan to handle a real-life situation.
- 2. is able to **communicate** mathematical thinking with coherence and clarity in formulating, investigating, analyzing, and solving real-life problems involving congruent triangles using appropriate and accurate representations.

TRANSFER GOAL

Students on their own and in the long will run communicate mathematical thinking in an investigative report to justify a plan that will ensure stability of structures.

PERFORMANCE TASK

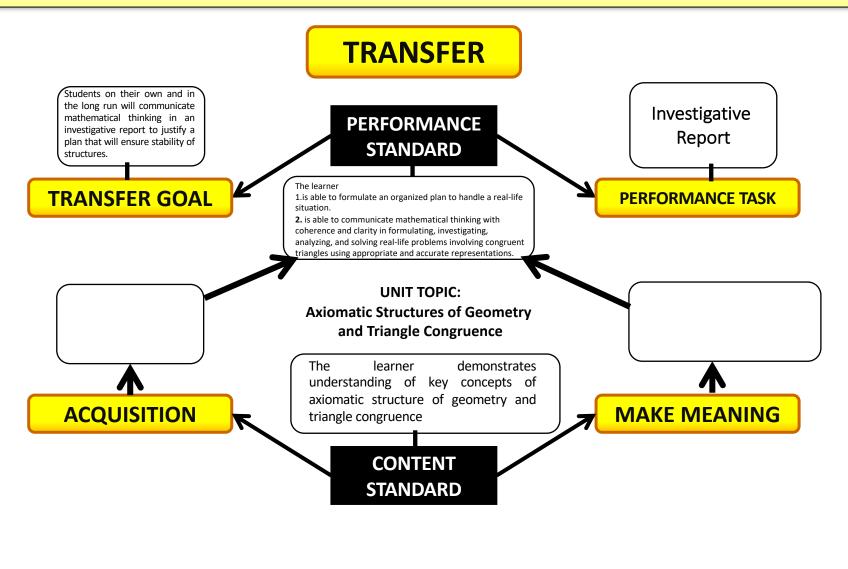
3

With the recent calamities that had visited the country and anticipating the BIG ONE, the government has a lot of preparations and interventions to do. There is a concern if the structures around the city are strong enough if a major calamity besets the city. As a Quality and Safety Officer, you and your team is tasked to investigate the stability of existing and forthcoming structures found in the city to ensure safety.

Your outputs will be presented to the people in the community and will be evaluated in terms of the organization of the report, authenticity of the data, <u>communication of mathematical</u> <u>concepts</u>, and presentation.

STEP 2: Unpack the Transfer Goal and Performance Task from Performance Standard. Then write in diagram.

STEP 2: Unpack the Transfer Goal and the Performance Task from Performance Standard. Then write in diagram.



Grade 8- THI	RD QUARTER				
Geometry	demonstrates	1. is able to formulate	40. describes a mathematical system.	M8GE-IIIa-1	
•	understanding of key concepts of axiomatic structure of geometry and triangle congruence.	an organized plan to handle a real-life situation.	 illustrates the need for an axiomatic structure of a mathematical system in general, and in Geometry in particular: (a) defined terms; (b) undefined terms; (c) postulates; and (d) theorems. 	M8GE-IIIa-c-1	Geometry III. 2009. p 3-4*
		 is able to communicate mathematical thinking with coherence and 	42. illustrates triangle congruence.***	M8GE-IIId-1	 Moving Ahead With Mathematics II. 1999 pp. 112-114* Geometry III. 2009. p 88-91*
		clarity in formulating, investigating, analyzing, and solving real-life problems involving congruent triangles using appropriate and accurate representations.	43. illustrates the SAS, ASA and SSS congruence postulates.***	M8GE-IIId-e-1	 Moving Ahead With Mathematics II. 1999 pp. 115-120* Geometry III. 2009. p 91-97* BEAM III – Module 10 Triangle Congruence Triangles: Different a yet the same DLM 3 – Module 1: Triangle Congruence
			 solves corresponding parts of congruent triangles 	M8GE-IIIf-1	 Moving Ahead With Mathematics II. 1999 pp. 114-115*
			45. proves two triangles are congruent.	M8GE-IIIg-1	 Moving Ahead With Mathematics II. 1999. pp. 121-123* Geometry III. pp. 98- 100*
			 proves statements on triangle congruence. 	M8GE-IIIh-1	
			 applies triangle congruence to construct perpendicular lines and angle bisectors. 	M8GE-IIIi-j-1	

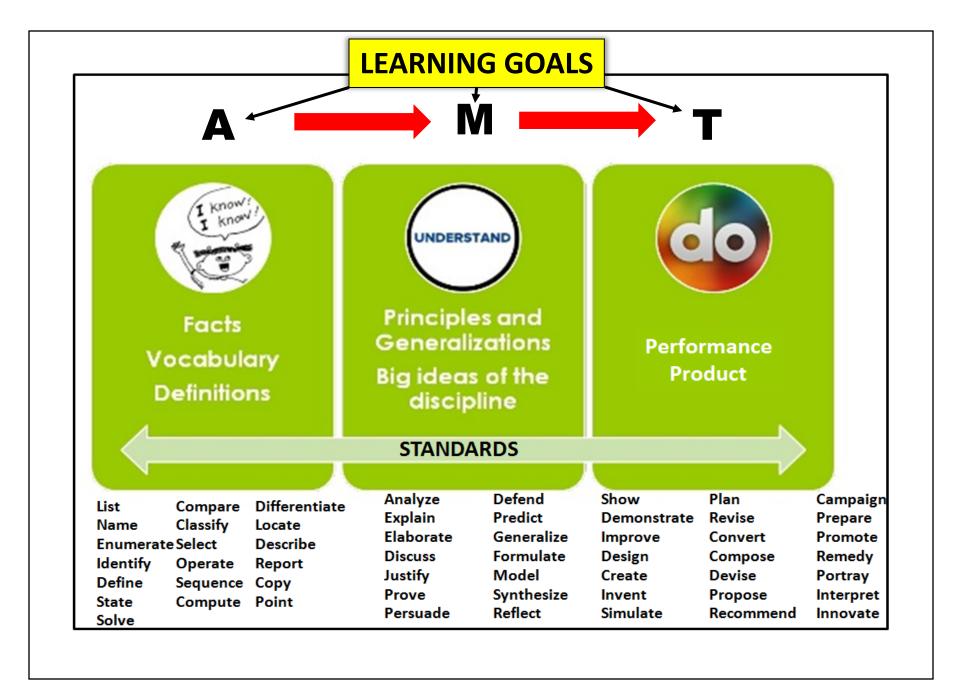
STEP 3: Review DepEd CG/School Curriculum Map and unpack the competencies.

Grade 8- THIR	DQUARTER				
Geometry	demonstrates	 is able to formulate 40. describes a mathematical system. 		M8GE-IIIa-1	
	understanding of key concepts of axiomatic structure of geometry and triangle congruence.	an organized plan to handle a real-life situation.	 illustrates the need for an axiomatic structure of a mathematical system in general, and in Geometry in particular: (a) defined terms; (b) undefined terms; (c) postulates; and (d) theorems. 	M8GE-IIIa-c-1	Geometry III. 2009. pp. 3-4*
		 is able to communicate mathematical thinking with coherence and 	42. illustrates triangle congruence.***	M8GE-IIId-1	 Moving Ahead With Mathematics II. 1999. pp. 112-114* Geometry III. 2009. pp. 88-91*
		darity in formulating, investigating, analyzing, and solving real-life			 Moving Ahead With Mathematics II. 1999. pp. 115-120* Geometry III. 2009. pp. 91-97*

Grade 8 Q3 has <u>8</u> CORE COMPETENCIES*

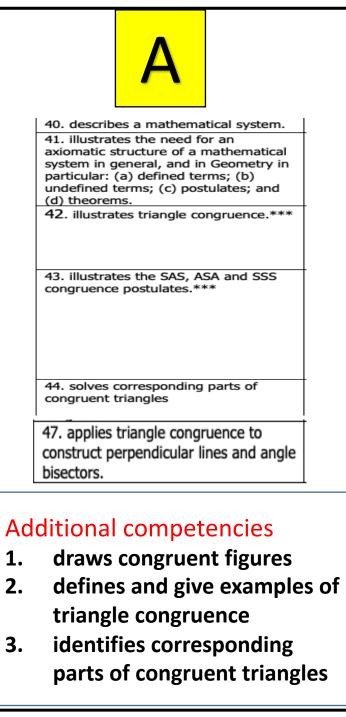
45. proves two triangles are congruent.	M8GE-IIIg-1	 Mothy Alead With Mathematics II. 1999. pp. 121-123* Geometry III. pp. 98- 100*
 proves statements on triangle congruence. 	M8GE-IIIh-1	
 applies triangle congruence to construct perpendicular lines and angle bisectors. 	M8GE-IIIi-j-1	

STE	STEP 4: Classify the unit competencies in terms of AMT Learning Goals. A and M are matched with Content Standard and T with Performance Standard. Unpack when needed.					
	CONTENT		PERFORMANCE	LEARNING COMPETENCY		
	Geometry		The learner 1. is able to formulate an organized plan to handle a real-life situation. 2. is able to communicate	 40. describes a mathematical system. 41. illustrates the need for an axiomatic structure of a mathematical system in general, and in Geometry in particular: (a) defined terms; (b) undefined terms; (c) postulates; and (d) theorems. 42. illustrates triangle congruence.*** 		
			mathematical thinking with coherence and clarity in formulating, investigating, analyzing, and solving real-life problems involving congruent triangles using appropriate and accurate representations.	43. illustrates the SAS, ASA and SSS congruence postulates.***		
Learning	Goal	Number of		44. solves corresponding parts of congruent triangles		
Acquisit	tion	competencies 6		45. proves two triangles are congruent.		
Meaning N		2		46. proves statements on triangle congruence.		
Transf	er	0		47. applies triangle congruence to construct perpendicular lines and angle bisectors.		



Grade 8- TH	IRD QUARTER	1					
Geometry	demonstrates	1.	is able to formulate	40.	describes mathematical system.	M8GE-IIIa-1	
	understanding of key concepts of axiomatic structure of geometry and triangle congruence.		an organized plan to situation.	41.	illustrates the need for an axiomatic structure of a mathematical system in general, and in Geometry in particular: (a) defined terms; (b) undefined terms; (c) postulates; and (d) theorems.	M8GE-IIIa-c-1	Geometry III. 2009. p 3-4*
		2.	is able to communicate mathematical thinking with concrence and	42	illustrates triangle congruence.***	M8GE-IIId-1	 Moving Ahead With Mathematics II. 1999. pp. 112-114* Geometry III. 2009. p 88-91*
		contention and clarity in formulating, investigating, analyzing, and solving real-life problems involving congruent triangles using appropriate and accurate representations.	43.	illustrates the SAS, ASA and SSS	M8GE-IIId-e-1	 Moving Ahead With Mathematics II. 1999. pp. 115-120* Geometry III. 2009. p 91-97* BEAM III – Module 10 Triangle Congruence - Triangles: Different ar yet the same DLM 3 – Module 1: Triangle Congruence 	
			44	solves orresponding parts of congruent triangles	M8GE-IIIf-1	 Moving Ahead With Mathematics II. 1999. pp. 114-115* 	
				45.	proves wo triangles are congruent.	M8GE-IIIg-1	 Moving Ahead With Mathematics II. 1999. pp. 121-123* Geometry III. pp. 98- 100*
				46.	proves tatements on triangle congruence.	M8GE-IIIh-1	
				47.	applies riangle congruence to construct perpendicular lines and angle bisectors.	M8GE-IIIi-j-1	

Will the attainment of these competencies eventually lead to students' TRANSFER OF LEARNING?



 45. proves two triangles are congruent. 46. proves statements on triangle congruence. Additional competencies generalizes the importance of triangle congruence in real-life structures. 		 Additional competencies 1. solves real-life problems involving triangle congruence 2. formulates questions to elicit mathematical thinking. 3. investigates real-life structures using triangle congruence. 4. communicates mathematical thinking with coherence and clarity. 	
•••		thinkin	g with coherence and
•••		thinkin	g with coherence and
real-life structures.	Before	thinkin clarity.	g with coherence and
real-life structures.	Before	thinkin clarity. Unpacking	g with coherence and After Unpacking
real-life structures.	Before	thinkin clarity. Unpacking npetencies	g with coherence and After Unpacking

STEP 4: Classify the remaining unit competencies in terms of AMT Learning Goals. A and M are matched with Content Standard and T with Performance Standard. *Unpack when needed.*

CONTENT STANDARD: The learner demonstrates understanding of key concepts of axiomatic structure of geometry and triangle congruence.

M8GE-IIIa-1: describes a mathematical system (A)

M8GE-IIIa-c-1: illustrates the need for an axiomatic structure of a mathematical system in general, and in Geometry in particular: (a) defined terms; (b) undefined terms; (c) postulates; and (d) theorems (A)

draws congruent figures (A)

defines and gives examples of triangle congruence (A)

identifies corresponding parts of congruent triangles (A)

M8GE-IIId-1: illustrates triangle congruence (A)

M8GE-IIId-e-1: illustrates the SAS, ASA and SSS congruence postulates (A)

M8GE-IIIf-1: solves corresponding parts of congruent triangles (A)

M8GE-IIIg-1: proves two triangles are congruent (M)

M8GE-IIIh-1: proves statements on triangle congruence (M)

generalizes the importance of triangle congruence in real-life structures (M)

M8GE-IIIi-j-1: applies triangle congruence to construct perpendicular lines and angle bisectors (A)

STEP 4: Classify the remaining unit competencies in terms of AMT Learning Goals. A and M are matched with Content Standard and T with Performance Standard. *Unpack when needed.*

PERFORMANCE STANDARD:

The learner

1. is able to formulate an organized plan to handle a real-life situation.

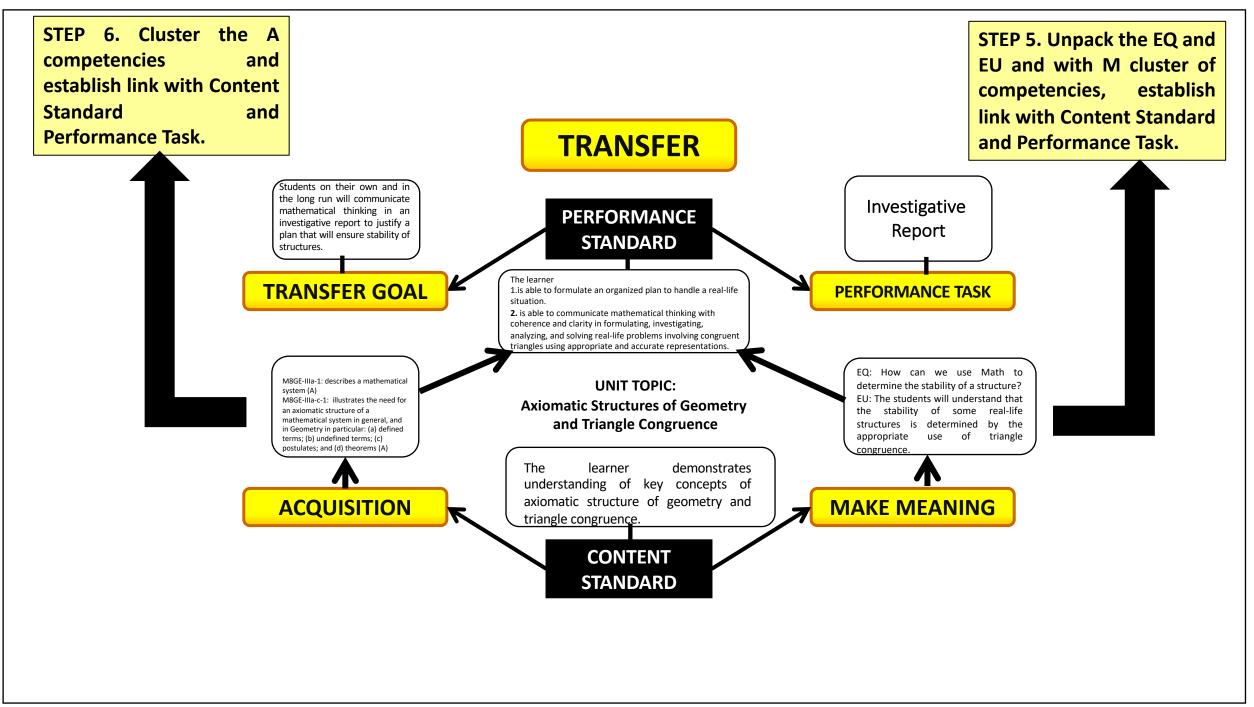
2. is able to communicate mathematical thinking with coherence and clarity in formulating, investigating, analyzing, and solving real-life problems involving congruent triangles using appropriate and accurate representations

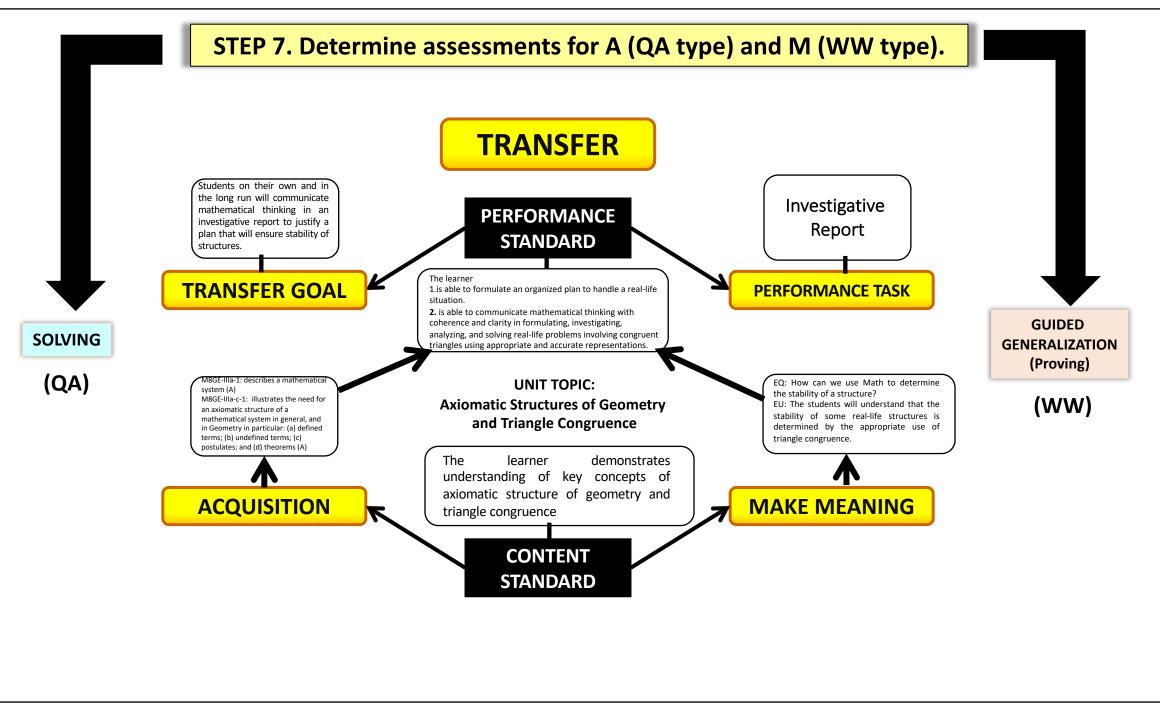
solves real-life problems involving triangle congruence (T)

formulates questions to elicit mathematical thinking (T)

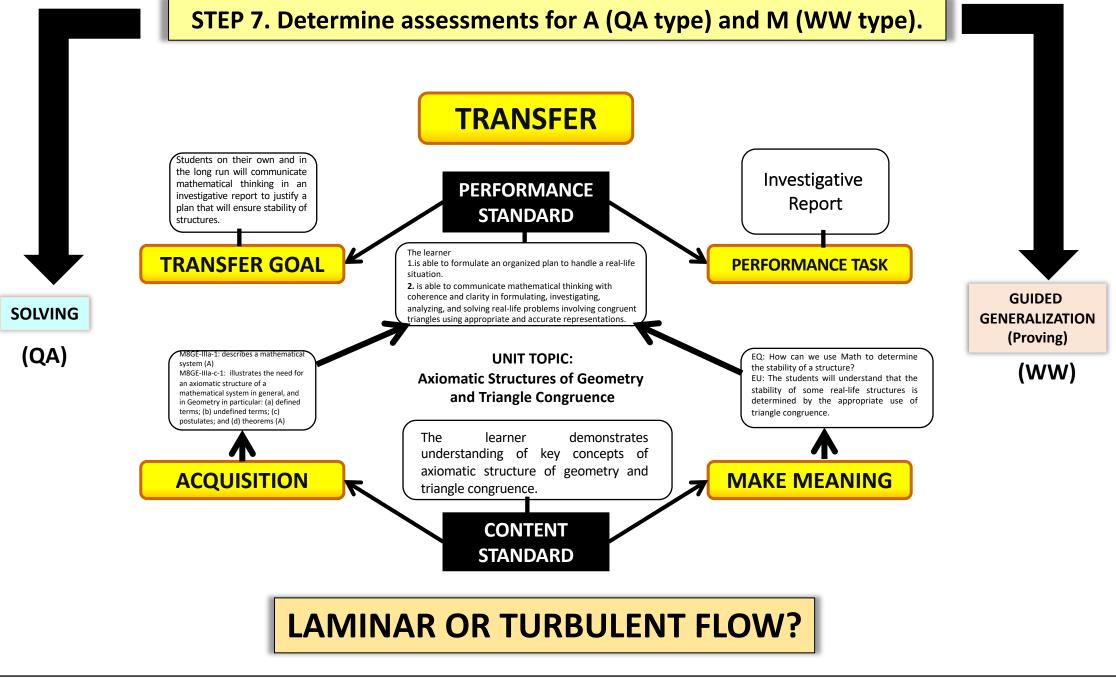
investigates real-life structures using triangle congruence (T)

communicates mathematical thinking with coherence and clarity (T)





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Grade Level: 8

Subject: Mathematics

Performance Standard: The learner

- 1. is able to formulate an organized plan to hardle a real-life situation.
- 2. is able to communicate mathematical thinking cherence and clarity in formulating, investigating, analyzing, and solving real-life problems involving congruent triangles using appropriate and accurate representations

Quarter 3				
Competencies	Code			
describes a mathematical system (A)	M8GE-IIIa-1			
Draws congruent figures (A)				
Defines and gives examples of triangle congruence (A)				
Identifies corresponding parts of congruent triangles (A)				
illustrates the need for an axiomatic structure of a mathematical system in general, and in Geometry in particular: (a) defined terms; (b) undefined terms; (c) postulates; and (d) theorems (A)	M8GE-IIIa-c-1			
illustrates triangle congruence (A)	M8GE-IIId-1			
illustrates the SAS, ASA and SSS congruence postulates (A)	M8GE-IIId-e-1			
solves corresponding parts of congruent triangles (A)	M8GE-IIIf-1			
proves two triangles are congruent (M)	M8G e mg 1			
proves statements on triangle congruence (M)	M8GE-IIIh-1			
Generalizes the importance of triangle congruence in real-life structures (M)				
applies triangle congruence to construct perpendicular lines and angle bisectors (A)	M8GE-IIIi-j-1			
Solves real-life problems involving triangle congruence (T)				
Formulate questions to elicit mathematical thinking (T)				
Investigates real-life structures using triangle congruence (T)				
Communicate mathematical thinking with coherence and clarity (T)				

LAMINAR OR TURBULENT FLOW?

.3 June 2020

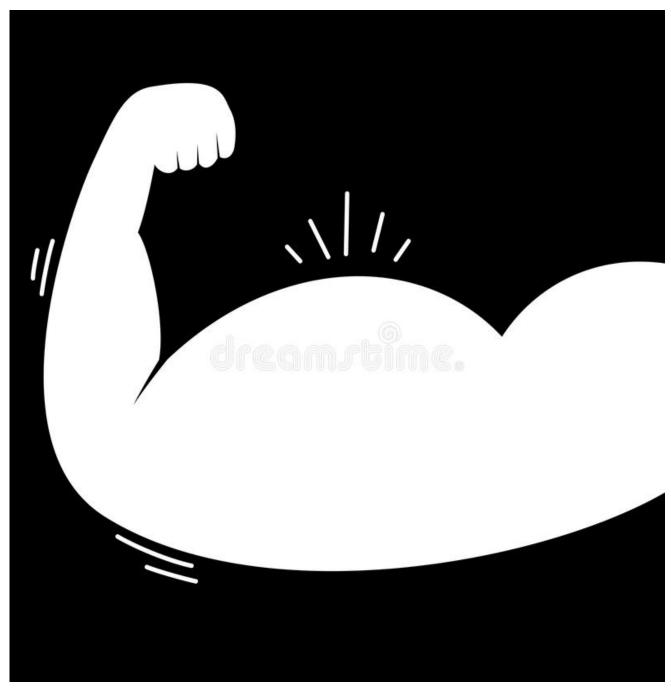
STREAMLINING BY:

<u>TECHNIQUE A</u>. ALIGNING CONTENT STANDARD AND COMPETENCIES WITH PERFORMANCE STANDARD

TECHNIQUE B. IDENTIFYING POWER AND SUPPORTING COMPETENCIES AND CLUSTERING THESE

13 June 2020

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What are Power Standards/Competencies?

- A focus for teachers on what to teach
- "Higher level of Learning"
- A prioritization of the academic standards
 - academic standards
- Provides purpose or reason for learning a specific competency

POWER COMPETENCIES

are curricular competencies that directly achieve the Performance Standard and pass all REAL criteria.

SUPPORTING COMPETENCIES

are curricular competencies which contribute to or serve as steps to the attainment of the Power Competencies.

SUPPORTING COMPETENCIES

POWER COMEPTENCIES

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OWER COMEPTENCIES

WHICH IS A POWER COMPETENCY AND SUPPORTING COMPETENCY?



SUBJECT	1	2	
ENGLISH	Identify Types of Modals	Explain Structure of Effective Persuasive Texts	
FILIPINO Use Graphic Organizers		Find the Main Idea	
MATH	Find Area of Rhombus, Trapezoid, Parallelogram	Find Area of Rectangle or Triangle	
ARALIN PANLIPUNAN	Record Oral Histories	Evaluate Historical Evidence	
SCIENCE	Detect Bias in a Scientific Conclusion	Analyze and Evaluate Scientific Explanation	

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WHICH IS A POWER COMPETENCY AND SUPPORTING COMPETENCY?

> READINESS ENDURANCE ASSESSMENT LEVERAGE

SUBJECT	1	2	
ENGLISH	Identify Types of Modals	Explain Structure of Effective Persuasive Texts	
FILIPINO	Use Graphic Organizers	Find the Main Idea	
MATH	Find Area of Rhombus, Trapezoid, Parallelogram	Find Area of Rectangle or Triangle	
ARALIN PANLIPUNAN	Record Oral Histories	Evaluate Historical Evidence	
SCIENCE	Detect Bias in a Scientific Conclusion	Analyze and Evaluate Scientific Explanation	

How can identification and clustering of power and supporting competencies be done for streamlining the curriculum?



Do the following steps:

- 1. Identify power and supporting competencies using REAL from core set of competencies.
- 2. Make clusters of power and supporting competencies.
- 3. Sequence clusters with the last related to the Performance Task.
- 4. Set the budget of time for teaching the clusters.

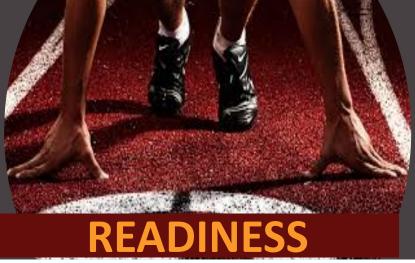
READINESS

ASSESSMENT



TECHNIQUE B. IDENTIFYING THE UNIT POWER AND SUPPORTING COMPETENCIES

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When the competency represents learning that is essential for success in a new unit, course of study or succeeding grade level, it has readiness.

GUIDE QUESTION

Does this standard contain prerequisite content and/or skills necessary for the next unit, course of study, or grade level?

EXAMPLE

The learner illustrates the need for an axiomatic structure of a mathematical system in general, and in Geometry in particular: (a) defined terms; (b) undefined terms; (c) postulates, (d) theorems.



When the competency represents learning that goes beyond one course or grade level and is representative of a concept or skill that is important in life, it has endurance.

GUIDE QUESTION

Does this standard have value beyond one single test date? Will this standard endure beyond the test? Will the knowledge and skills be important beyond this unit?

EXAMPLE

The learner illustrates the need for an axiomatic structure of a mathematical system in general, and in Geometry in particular: (a) defined terms; (b) undefined terms; (c) postulates, (d) theorems.



When the competency is often tested in an achievement or admissions exam or for a job, it has value for assessment.

GUIDE QUESTION

Does this competency prepare the learners for national or international assessments?

EXAMPLE

The learner illustrates the need for an axiomatic structure of a mathematical system in general, and in Geometry in particular: (a) defined terms; (b) undefined terms; (c) postulates, (d) theorems.







When the competency represents learning that is applied both within the content area and in other content areas, it has leverage.

GUIDE QUESTION

Does this standard have multidisciplinary connections? Is this standard relevant in other disciplines?

EXAMPLE

The learner illustrates the need for an axiomatic structure of a mathematical system in general, and in Geometry in particular: (a) defined terms; (b) undefined terms; (c) postulates, (d) theorems. (Which discipline can this be linked?)

TECHNIQUE B. IDENTIFYING UNIT POWER AND SUPPORTING COMPETENCIES WITH REAL

COMPETENCIES	R (needed for next unit or grade)	E (needed for real life)	A (needed for achievement or admissions or job tests)	L (needed by other subjects)	POWER OR SUPPORTING?

COMPETENCIES The Learner	Readiness (needed for next level)	Endurance (needed for life/ practice of profession)	Assessment (needed for Nat'l or Int'l Achievement Test)	Leverage (needed for other subjects)
A.1 Describes the 4 parts of a mathematical system.	\bigotimes	×	×	×
A.2 Explains the need for an axiomatic structure of a mathematical system in general, and in Geometry in particular: (a) defined terms; (b) undefined terms; (c) postulates; and (d) theorems.	Ø	Ø	Ø	Ø
A.3 draws congruent figures	\bigcirc	×	Ø	X
A.4 Defines and gives examples of triangle congruence	\bigotimes	×	Ø	×

COMPETENCIES The Learner	Readiness (needed for next level)	Endurance (needed for life/ practice of profession)	Assessment (needed for Nat'l or Int'l Achievement Test)	Leverage (needed for other subjects)
A.5 Identifies corresponding parts of congruent triangle.	\bigotimes	×	Ø	\bigotimes
A.6 States the Triangle Congruence Postulates (SSS, SAS and ASA)	\bigotimes	×	Ø	×
A.7 Explains the SAS, ASA and SSS congruence postulates	\bigotimes	×	Ø	×
A.8 solves corresponding parts of congruent triangles	\bigotimes	×	Ø	×
A.9 proves two triangles are congruent	Ø	×	×	×

COMPETENCIES The Learner	Readiness (needed for next level)	Endurance (needed for life/ practice of profession)	Assessment (needed for Nat'l or Int'l Achievement Test)	Leverage (needed for other subjects)
A.10 proves statements on triangle congruence	Ø	×	×	×
A.11 applies triangle congruence to construct perpendicular lines and angle bisectors	Ø	X	Ø	×
A.12 solves real-life problems involving congruent triangles	Ø	Ø	Ø	Ø
A.13 generalizes the importance of triangle congruence in real-life structures	\bigotimes	Ø	Ø	Ø

COMPETENCIES The Learner	Readiness (needed for next level)	Endurance (needed for life/ practice of profession)	Assessment (needed for Nat'l or Int'l Achievement Test)	Leverage (needed for other subjects)
A.14 formulates questions to elicit mathematical thinking	\bigotimes	Ø	×	\bigotimes
A.15 investigates real-life structures using triangle congruence	Ø	Ø	×	×
A.16 communicates mathematical thinking with coherence and clarity	Ø	Ø	Ø	Ø

Competencies	R	Е	Α	Power/Supporting	
Competencies				Competency	
A.1 describes the 4 parts of a mathematical system.				Supporting	
A.2 explains the need for an axiomatic structure of a mathematical system in general, and in Geometry in particular: (a) defined terms; (b) undefined terms; (c) postulates; and (d) theorems.				Power	
A.3 draws congruent figures				Supporting	
A.4 defines and gives examples of triangle congruence				Supporting	
A.5 identifies corresponding parts of congruent triangle.				Supporting	
A.6 states the Triangle Congruence Postulates (SSS, SAS and ASA)				Supporting	
A.7 explains the SAS, ASA and SSS congruence postulates				Supporting	
A.8 solves corresponding parts of congruent triangles				Supporting	
A.9 proves two triangles are congruent				Supporting	
A.10 proves statements on triangle congruence				Supporting	
A.11 applies triangle congruence to construct perpendicular lines and angle bisectors				Supporting	
A.12 solves real-life problems involving congruent triangles				Power	
A.13 generalizes the importance of triangle congruence in real-life structures				Power	
A.14 formulates questions to elicit mathematical thinking				Supporting	
A.15 investigates real-life structures using triangle congruence				Supporting	
A.16 communicates mathematical thinking with coherence and clarity				Power	

CLUSTERING AND BUDGET OF TIME OF UNIT POWER AND SUPPORTING COMPETENCIES



CLUSTER NO. (NO. OF DAYS)	POWER COMPETENCIES	SUPPORTING COMPETENCIES

CLUSTERING AND BUDGET OF TIME OF UNIT POWER AND SUPPORTING COMPETENCIES

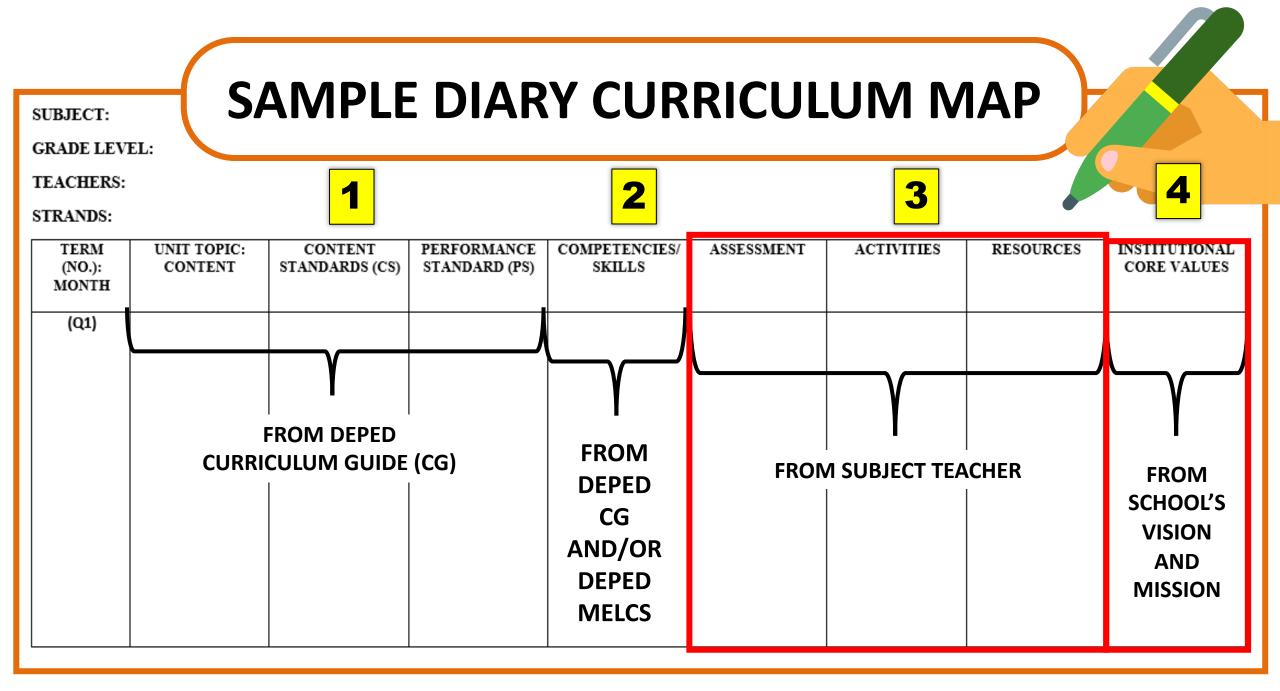


CLUSTER NO. (NO. OF DAYS)	POWER COMPETENCIES	SUPPORTING COMPETENCIES
1 (16 days)	A.2 Explains the need for an axiomatic structure of a mathematical system in general, and in Geometry in particular: (a) defined terms; (b) undefined terms; (c) postulates; and (d) theorems.	 A.1 Describes the 4 parts of a mathematical system. A.3 Draws congruent figures A.4 Defines and gives examples of triangle congruence A.5 Identifies corresponding parts of congruent triangle. A.6 States the Triangle Congruence Postulates (SSS, SAS and ASA) A.7 Explains the SAS, ASA and SSS congruence postulates A.8 Solves corresponding parts of congruent triangles A.1 Applies triangle congruence to construct perpendicular lines and angle bisectors
2 (8 days)	A.13 Generalizes the importance of triangle congruence in real-life structures	A.9 Proves two triangles are congruentA.10 Proves statements on triangle congruence
3 (8 days)	 A.12 Solves real-life problems involving congruent triangles A.16 Communicates mathematical thinking with coherence and clarity 	 A.14 Formulates questions to elicit mathematical thinking A.15 Investigates real-life structures using triangle congruence
TOTAL 40 days		

K to 12 BASIC EDUCATION CURRICULUM

THIRD QUARTER

	AM STANDARD	appreciation of Philippine Culture and those of other countries. The learner demonstrates communicative competence through his/ her understanding of Philippine Literature and other texts types for a						
	ELEVEL STANDARD	The learner demons textual information;	leeper appreciation of Philippine Culture and those other countries. The learner demonstrates understanding of: Southeast Asian literature as mirror to a shared heritage ; coping strategies in processing extual information; strategies in examining features of a listening and viewing material; structural analysis of words and propaganda echniques; and grammatical signals for opinion- making, persuasion, and emphasis.					
PERFO	RMANCE STANDARD		mation sources, gran					turing use of properly iate prosodic features,
Week	RC Reading Comprehension	LC Listening Comprehension	VC Viewing Comprehension	V Vocabulary Development	LT Literature	WC Writing and Composition	F Oral Language and Fluency	G Grammar Awareness
	EN8RC-IIIa-12.1	EN8LC-IIIa-7.3:	EN8VC-IIIa-	EN8V-IIIa-15.3	CHICK T TTT- 44			
	Recognize propaganda techniques used in a given text	Determine the target audience of a listening text and the	3.4/4.4/5.4: Determine the target audience of	Explain the meaning of a word through	EN8LT-IIIa-11: Identify the notable literary genres	EN8SS-IIIa-1.10: Organize information about a chosen subject	EN8OL-IIIa- 3.11: Use the correct sounds of English during	EN8RC-IIIa-10: Share ideas using opinion-marking signals
•	Recognize propaganda techniques used in a	Determine the target audience of a listening text and the 8 Q3 COR	3.4/4.4/5.4: Determine the target audience of	Explain the meaning of a word through	Identify the notable literary genres	organize information about a chosen subject	3.11: Use the correct sounds of English during	Share ideas using opinion-marking signals
	Recognize propaganda techniques used in a given text	Determine the target audience of a listening text and the 8 8 8 2 2	3.4/4.4/5.4: Determine the target audience of B has E CC FOR	Explain the meaning of a word through	Identify the notable literary genres	Organize information about a chosen subject	3.11: Use the correct sounds of English during	Share ideas using opinion-marking signals
	Recognize propaganda techniques used in a given text	Determine the target audience of a listening text and the B Q C COR ule of clust and worth of ideas presented in the text listened to	3.4/4.4/5.4: Determine the target audience of B has E CC FOR	Explain the meaning of a word through S 3 C S S C S S C S S C S S C S S S C S	Identify the notable literary genres CLUS ETER ETER EEEEE EEEEEEEEEEEEEEEEEEEEEE	Organize information about a chosen subject STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER STER	3.11: Use the correct sounds of English during SO SO SO SO Correct stress, pitch, and juncture when delivering a	Share ideas using opinion-marking signals



MAPPING ASSESSMENT AND ACTIVITIES WITH UNIT POWER AND SUPPORTING COMPETENCIES

CLUSTER NO. (NO. OF	POWER COMPETENCIES	SUPPORTING COMPETENCIES	ASSESSMENT		LM ACTIVITY/ IATERIALS:	INSTITUTIONAL CORE VALUES
DAYS)				OFFLINE	ONLINE	

MAPPING ASSESSMENT AND ACTIVITIES WITH UNIT POWER AND SUPPORTING COMPETENCIES

CLUSTER NO. (NO. OF	POWER COMPETENCIES	SUPPORTING COMPETENCIES	ASSESSMENT	PEAC LM ACTIVITY/ MATERIALS:		INSTITUTIONAL CORE VALUES	
DAYS)				OFFLINE	ONLINE		
2 (10 days)	A.12 Solves real-life problems involving congruent triangles	A.8. Solves corresponding parts of congruent triangles	A. 8. Problem Solving	A.8 Textbook Activity	A. 8. Supplementary Worksheet Material: https://www.nlpanthers.org/ downloads/chap055.pdf		
		A. 11 Applies triangle congruence to construct perpendicular lines and angle bisectors	A. 11 Figure Construction	A.11 Textbook Activity	A.11 PEAC LM p. 112 Activity 12 Title: Paper Planes Materials: http://www.youtube.com/wa tch?v=y3_VMPkzI8A	Logical	
3 (10 days)	A.13 Generalizes the importance of triangle congruence in real-life structures	A.9 Proves two triangles are congruent	A. 9 Proving	A. 9 PEAC LM p. 102 Activity 3 Title: Concept Building about Congruent Triangles Materials: Modeling with Manipulatives	A. 9 PEAC LM p. 103 Activity 3 Title: Concept Building about Congruent Triangles Material: http://www.mathlearning.co m/geometry-congruent- triangles.html	Reasoning	
		A.10 Proves statements on triangle congruence	A. 10 Proving	A.10 PEAC LM p. 108 Activity 7 Title: CFocused Instruction on Proving Triangle Congruence Materials: Completed Proofs	A. 10 PEAC LM p. 108 Activity 7 Title: Focused Instruction on Proving Triangle Congruence Materials: http://www.youtube.com/wa tch?v=TPL12Tk7L6U		

Subject: Mathematics

Grade Level: 8



Unit Topic: Axiomatic Structure of Geometry and Triangle Congruence

Content Standard: The learner demonstrates understanding of key concepts of axiomatic structure of geometry and triangle congruence.

Performance Standard: The learner

1. is able to formulate an organized plan to handle a real-life

situation.

 2. is able to communicate mathematical thinking with coherence and clarity in formulating, investigating, analyzing, and solving real-life problems involving congruent triangles using appropriate and accurate representations. **Learning Competency:** The learner explains the need for an axiomatic structure of a mathematical system in general, and in Geometry in particular: (a) defined terms; (b) undefined terms; (c) postulates; and (d) theorems.

OFFLINE ACTIVITY

Example 1:

Use inductive reasoning to find the sum of the first 20 even numbers. Solution:

- Find the first few sums. Notice that each sum is the square of the number of terms plus the number of terms.
- 2. Look for a pattern.
- 3. Make a conjecture

n (number of terms)		sum	pattern
1	2	2	1 ² + 1
2	2+4	6	2 ² + 2
3	2+4+6	12	3 ² + 3
4	2+4+6+8	20	4 ² + 4
			CONJECTURE:n ² + n



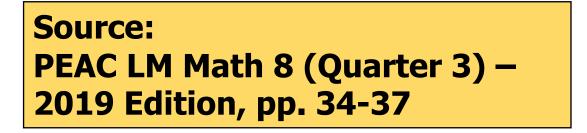
The sum of the first 20 even numbers is $20^2 + 20 = 420$. The expression $n^2 + n$ will help you find easily the sum of the nth terms of even numbers.

ACTIVITY 4. Skills Practice

Use inductive reasoning to answer the given problems.

 Find the sum of the first 20 odd numbers and make a conjecture out of it. Complete the table below.

n (number of terms)		sum	pattern
1	1		
2	1+3		
3	1+3+5		
4	1+3+5+7		
	1		CONJECTURE:



Learning Competency: The learner explains the need for an axiomatic structure of a mathematical system in general, and in Geometry in particular: (a) defined terms; (b) undefined terms; (c) postulates; and (d) theorems.

ONLINE ACTIVITY

ACTIVITY 3. Inductive Reasoning from Patterns

Read first the Process Questions before watching the three videos from http://www.ck12.org/book/CK-12-Basic-Geometry-Concepts/section/2.1/. Read also the Guidance Article and try to answer Guided Practice.

Take down notes in your Ever Note or in your notebook.

Click on the red-colored Practice button on top of the page or click this link <u>http://www.ck12.org/book/CK-12-Basic-Geometry-Concepts/section/2.1/</u> to practice inductive reasoning from patterns. This is a 15-item interactive quiz which provides immediate feedback. Just click start if you are ready to answer. You can get a hint if you have difficulty in answering a problem.

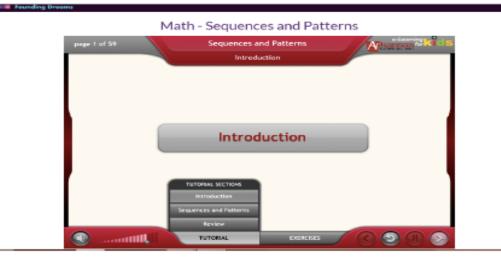
Process Questions:

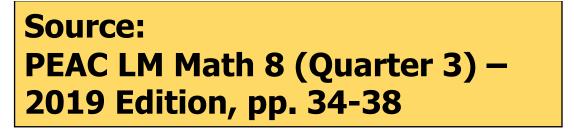
What is inductive reasoning?

2. How do you call a conclusion drawn from inductive reasoning? How is it disproved?

Interactive practice

http://www.e-learningforkids.org/math/lesson/sequences-and-patterns/





Learning Competency: The learner proves statements on triangle congruence.

OFFLINE ACTIVITY

ACTIVITY 8. Proof Flowcharting

Study the examples below. Follow the arrow. It indicates the consequence of the given statement.

Example 1:

STATEMENTS	REASONS
 ∆AME is an isosceles ∆ where ME 	1. Given
is the base	
2. AM≅AE S* 🔎	2. Isosceles triangle has two
	congruent sides.
3. G is the midpoint of ME	3. Given
4. GM ≅ GE S*	Midpoint divides a line segment into
	two congruent segments.
5. AG≅AG S*	5. Reflexive Property of Equality
 ΔAGE≅ΔAGM 	6. SSS Congruence Postulate

Example 2:

Admpie 2.	
STATEMENTS	REASONS
1. TP is a diagonal of the	1. Given
parallelogram TSPR	
2. $\angle STP \cong \angle RPT$	2. If lines cut by the transversal are
A* //	parallel, then alternate interior
	angles are congruent.
3. $\angle SPT \cong \angle RTP$	3. If lines cut by the transversal are
A* (2)	parallel, then alternate interior
	angles are congruent.
4. PT≅TP	A line segment is congruent to
S*	itself (Reflexivity)
5. ΔTSP≅ΔPRT	5. ASA Congruence Postulate
-	

ACTIVITY 9. Practice On Proving Triangle Congruence

Answer this exercise with a partner. Write a 2-column proof of the ff. and sketch the figure:

 Given: MN ⊥ MR & NP where R & P are on the opposite sides of MN O is the midpoint of MN Prove: ∇RMO ≅ ∇PNO

 Given: ∇XWY is isosceles where XY is the base Z is the midpoint of XY Prove: ∇WZX ≅ ∇WZY

Source: PEAC LM Math 8 (Quarter 3) – 2019 Edition, pp. 110-111

Learning Competency: The learner proves statements on triangle congruence.

ONLINE ACTIVITY

ACTIVITY 10. Interactive Activity on Proving Congruency of Triangles

http://www.mathwarehouse.com/classroom/worksheets/congruent_triangles/Angle-Angle-Side-euclidean-proof-worksheet-activities.pdf

This site provides interactive activities on proving congruency of triangles.

http://www.mathwarehouse.com/geometry/congruent_triangles/side-angle-sidepostulate.php

This website provides interactive activities on proving congruency of triangles using the SAS congruence postulate.

Explore these sites and answer as many exercises as you wish until you can master the skill in proving congruency of triangles.

Reflections: Answer these questions in your reflection log.

- How do you find the exercises?
- Is learning how to prove congruency of triangles taking place? Explain.
- 3. What have you realized after doing the exercises?
- 4. Do they improve your logical thinking?
- 5. Do you think this can help you in your day to day activity? How?

6. How can the concepts of congruency of triangles affect stability of a structure?

Click on SAVE if you have responded to the questions asked

ACTIVITY 11. Exercises on Proving

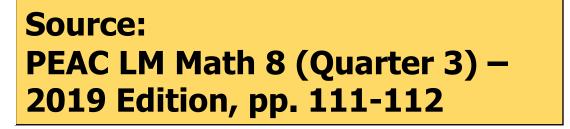
On your own, sketch the figure of the given triangles and make a 2-column proof of the ff.

 Given: AE and CD bisect each other at M Prove: ΔAMC ≅ ΔEMD

STATEMENTS	REASONS

2. Given: PR is the⊥bisector of ST at R Prove: ΔPRS≅ ΔPRT

STATEMENTS	REASONS



UNIT HORIZONTAL ALIGNMENT AND VERTICAL LEARNING PROGRESSION

CLUSTER NO. (NO. OF	POWER COMPETENCIES	SUPPORTING COMPETENCIES	ASSESSMENT		I ACTIVITY/ ERIALS:	INSTITUTIONAL CORE VALUES
DAYS)				OFFLINE	ONLINE	
2 (10 days)	A.12 Solves real-life problems involving congruent triangles	A.8. Solves corresponding parts of congruent triangles	A. 8. Problem Solving	A.8 Textbook Activity	A. 8. Supplementary Worksheet Material: https://www.nlpanthers.org/ downloads/chap055.pdf	
		A. 11 Applies triangle congruence to construct perpendicular lines and angle bisectors	A. 11 Figure Construction	A.11 Textbook Activity	A.11 PEAC LM p. 112 Activity 12 Title: Paper Planes Materials: http://www.youtube.com/wa tch?v=y3_VMPkzI8A	Logical
3 (10 days)	A.13 Generalizes the importance triangle congruence in real-life structures	A.9 Proves two triangles are congruent	A. 9 Proving	A. 9 PEAC LM p. 102 Activity 3 Title: Concept Building about Congruent Triangles Materials: Modeling with Manipulatives	A. 9 PEAC LM p. 103 Activity 3 Title: Concept Building about Congruent Triangles Material: http://www.mathlearning.co m/geometry-congruent- triangles.html	Reasoning
		A.10 Proves statements on triangle congruence	A. 10 Proving	A.10 PEAC LM p. 108 Activity 7 Title: CFocused Instruction on Proving Triangle Congruence Materials: Completed Proofs	A. 10 PEAC LM p. 108 Activity 7 Title: Focused Instruction on Proving Triangle Congruence Materials: http://www.youtube.com/wa tch?v=TPL12Tk7L6U	

SUBJECT:

SAMPLE DIARY CURRICULUM MAP

GRADE LEVEL:

TEACHERS:

STRANDS:

TERM (NO.): MONTH	UNIT TOPIC: CONTENT	CONTENT STANDARDS (CS)	PERFORMANCE STANDARD (PS)	COMPETENCIES/ SKILLS	ASSESSMENT	ACTIVITIES	RESOURCES	INSTITUTIONAL CORE VALUES
Q3	CONGRUENT TRIANGLES	The learner demonstrates understanding of key concepts of axiomatic structure of geometry and triangle congruence	The learner 1.is able to formulate an organized plan to handle a real-life situation. 2. is able to communicate mathematical thinking with coherence and clarity in formulating, investigating, analyzing, and solving real-life problems involving congruent triangles using appropriate and accurate representations.	 A.8 Solves corresponding parts of congruent triangles A.13 generalizes the importance of triangle congruence in real-life structures A.15 investigates real-life structures using triangle congruence A.16 communicate mathematical thinking with coherence and clarity 	A.8. Problem Solving A.13 Guided Generalization A.15. Performance Task A.16 Performance Task	A.8. Worksheet A.13. CER (Pinwheel Discussion) A.15. Scaffold for Transfer A.16. Scaffold for Transfer	A. 8. Textbook Online Resource A.13 Textbook Online Resource A.15 Online Resource A.16 Online Resource	Logical Reasoning

UBJECT: RADE LEVI EACHERS: IRANDS:				Y CUR				
TERM (NO.): MONTH	UNIT TOPIC: CONTENT	CONTENT STANDARDS (CS)	PERFORMANCE STANDARD (PS)	COMPETENCIES/ SKILLS	ASSESSMENT	ACTIVITIES	RESOURCES	INSTITUTIONA CORE VALUES
Q3	CONGRUENT TRIANGLES	The learner demonstrates understanding of key concepts of axiomatic structure of geometry and triangle congruence	The learner 1.is able to formulate an organized planko handle a real-life situation. 2. is able to communicate mathematical thinking with coherence and clarky in formulating,	A.8 Solves corresponding parts of congruent triangles A.13 generalizes the importance of triangle congruence in real-life structures A.15 investigates	A.8. Problem Solving A.13 Guided Generalization A.15. Performance	A.8. Worksheet A.13. CER (Pinwheel Discussion) A.15.	A. 8. Textbook Online Resource A.13 Textbook Online Resource A.15 Online Resource	Logical Reasoning
			investigating, analyzing, and solvir real-life problem involving congruent triangles using appropriate and accurate representations.	real-life structures using triangle congruence A.16 communicate mathematical thinking with coherence and clarity	Task A.16 Performance Task	Scaffold for Transfer A.16. Scaffold for Transfer	A.16 Online Resource	

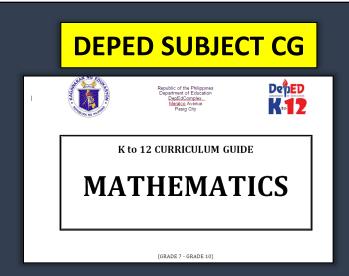
PEAC CERTIFICATION ASSESSMENT INSTRUMENT

Standards of Compliance

1. A curriculum map in each subject area that:					
- is aligned with the philosophy, vision, mission, goals and objectives*	4	3	2	1	0
- is aligned with the Kto12 curriculum guides, standards and competencies*	4	3	2	1	0
 shows unpacked Kto12 standards and competencies in different ways in all subjects* 	4	3	2	1	0
- shows horizontal alignment between standards, competencies, assessment, instruction and resources in all the learning units*	4	3	2	1	0
- articulates vertical learning progressions across the different grade levels*	4	3	2	1	0
2. The implementation and continuous improvement of the curriculum maps by:	·				
- checking that the standards and competencies, activities and assessments and					
resources and integration of the PVMGO in the curriculum maps are reflected in	4	3	2	1	0
the unit learning plans					
- conducting a periodic review, revision and updating of the curriculum maps	4	3	2	1	0

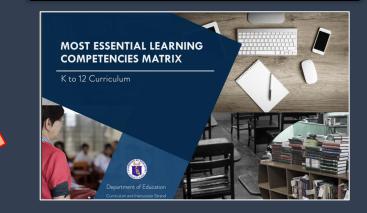
SAMPLE QUARTERLY CALENDAR OF COMPETENCY CLUSTERS

SUBJECT:	GRADE:	SECTION:	TEACHER	: UNIT TO	PIC:	
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2 ACQUISITION CLUSTER 1	3 ACQUISITION CLUSTER 1 OFFLINE -TEXTBOOK	4 ACQUISITION CLUSTER 1 OFFLINE -TEXTBOOK	5 ACQUISITION CLUSTER 1 OFFLINE – TEXTBOOK	6 ACQUISITION CLUSTER 1 ONLINE – YOUTUBE VIDEO	7 ACQUISITION REVIEW
8	9 ACQUISITION TEST	10 MAKING MEANING CLUSTER 2	11 MAKING MEANING CLUSTER 2	12 MAKING MEANING CLUSTER 2	13 MAKING MEANING CLUSTER 2	14 MAKING MEANING REVIEW
15	16 MAKING MEANING CLUSTER 2	17 MAKING MEANING TEST	18 SCAFFOLD FOR PT CLUSTER 3	19 SCAFFOLD FOR PT CLUSTER 3	20 SCAFFOLD FOR PT CLUSTER 3	21 PT ASSIGNMENT
22	23 SCAFFOLD FOR PT CLUSTER 3	24 SCAFFOLD FOR PT CLUSTER 3	25 SCAFFOLD FOR PT CLUSTER 3	26 SCAFFOLD FOR PT CLUSTER 3	27 SCAFFOLD FOR PT CLUSTER 3	28 PT ASSIGNMENT
29	30 SCAFFOLD FOR PT CLUSTER 3	31 SCAFFOLD FOR PT CLUSTER 3	1 SCAFFOLD FOR PT CLUSTER 3	2 SCAFFOLD FOR PT CLUSTER 4	3 SCAFFOLD FOR PT CLUSTER 4	4 PT ASSIGNMENT





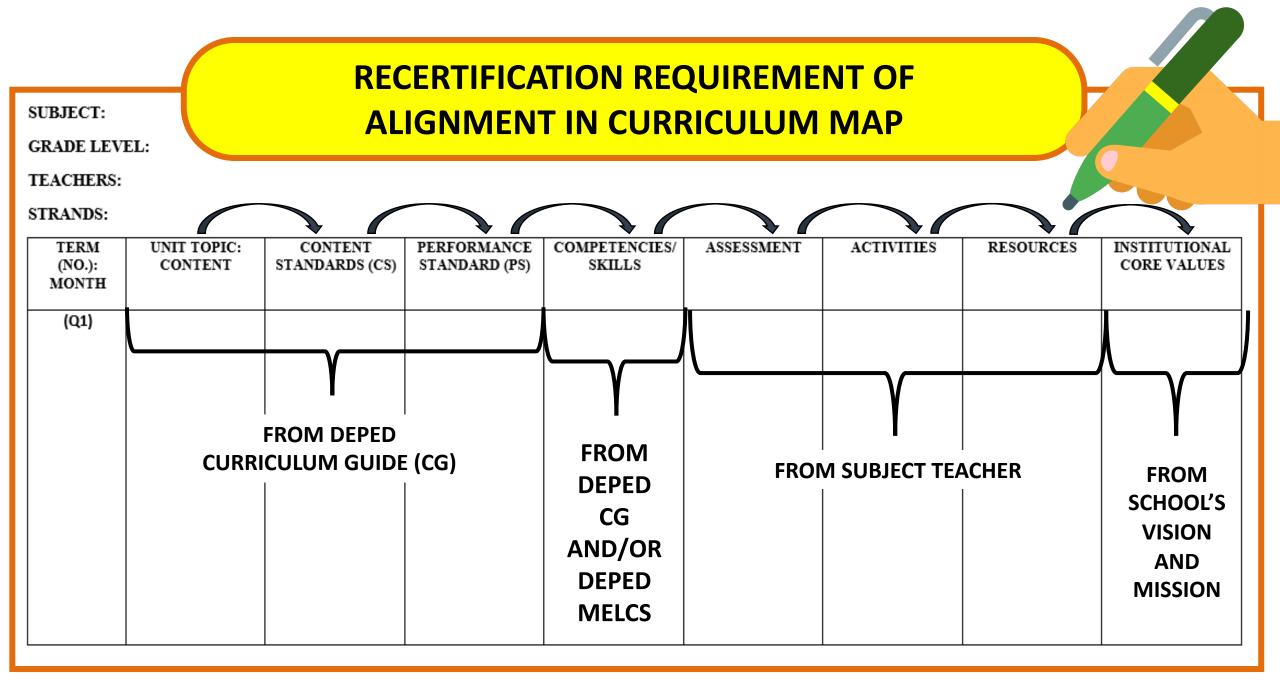


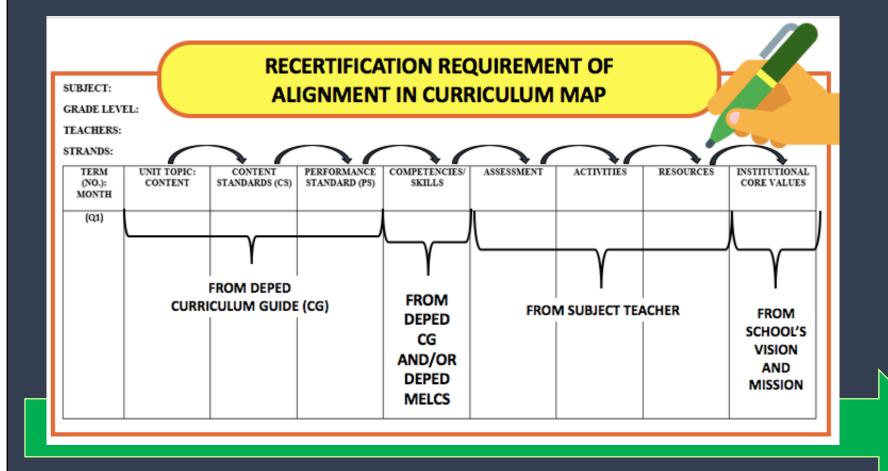


SCHOOL CURRICULUM SY 2020-2021

PEAC CERTIFICATION ASSESSMENT INSTRUMENT

13 June 2020





GOAL: TEACH ENDURING SKILLS FOR WORK AND LIFE IN THE 21st CENTURY

13 June 2020

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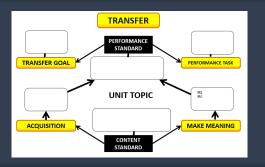
ENSURE ENDURANCE OR TRANSFER OF LEARNING BY DOING ANY OF THE FF. WITH MELCs:

- 1. Unpack into sub-competencies/tasks
- 2. Repeat in another unit or grade level
- **3. Follow-up in higher grade levels**
- 4. Cluster with other competencies
- 5. Merge with other competencies and rephrase
- 6. Focus on skill rather than on content
- 7. Align with unit performance standard

13 June 2020

STREAMLINING FOR ENDURANCE / TRANSFER BY:

TECHNIQUE A. ALIGNING CONTENT STANDARD AND COMPETENCIES WITH PERFORMANCE STANDARD



STEPS:

- 1. Copy the Content and Performance Standards and write Unit Topic.
- 2. Unpack the Transfer Goal and Performance Task from Performance Standard. Then write in diagram.
- 3. Review DepEd CG/School Curriculum Map and take out competencies that are not directly aligned with Performance Standard. These competencies may already have been taught or may be taught in another grade or unit.
- 4. Classify the remaining unit competencies in terms of AMT Learning Goals. A & M with Content and T with Performance Standard. Unpack when needed.
- 5. Unpack the EQ and EU and with M cluster of competencies, establish link with Content Standard and Performance Task.
- 6. Cluster the A competencies and establish link with Content Standard and Performance Task.
- 7. Determine assessments for A (QA type) and M (WW type).

TECHNIQUE B.IDENTIFYING POWERANDSUPPORTINGCOMPETENCIESANDCLUSTERING THESE



How can identification and clustering of power and supporting competencies be done for streamlining the curriculum?

Do the following steps:

- 1. Identify power and supporting competencies using REAL from core set of competencies.
- 2. Make clusters of power and supporting competencies.
- 3. Sequence clusters with the last related to the Performance Task.
- 4. Set the budget of time for teaching the clusters.



Never give up. Today is hard. Tomorrow will be worse but the day after tomorrow will be sunshine. - Jack Ma

