Kindergarten Mathematics

The purpose of this document is to clarify what students should know and be able to do in Quarter 2.

The Competencies listed in the table below are developed from the Texas Essential Knowledge and Skills (TEKS) for that grade level. The chart defines which quarter the Competency is reported (Q1 = Grading Period 1, Q2 = Grading Period 2, etc.).

Teachers will report on the competencies using the Grading Progressions which are comprised of four proficiency levels (developing (DV), progressing (PG), and proficient (PF)) and defines the knowledge and skills students will master on their pathway to proficiency. The Grading Progressions for each Competency are below the yearlong outline of the Competencies. The Grading Progressions define what a student knows and is able to do related to that competency at the end of a unit or quarter. To see what success on each individual competency looks like in a particular unit, please see the Public Overview document for the course.

Students who receive a mark of "Proficient" meet the grade level expectation for that Competency.

TEKS	Competencies	Q 1	Q 2	Q 3	Q 4
K.1B, K.1E, K.1G	**C1 — Problem Solving** The student analyzes word problems, utilizes a strategy, creates multiple representations, communicates mathematical thinking (oral and written), and determines an answer or solution.	**X**	**X**	**X**	**X**
K.1A, K.1C, K.1D, K.1F, **K.2B, K.2H, K.2I, K.2A**	**C2— Numeration** The student understands how to represent and compare numbers within real-world context.	**X**	**X**	**X**	
K.1A, K.1C, K.1D, K.1F **K.3B, K.2I**	**C3— Operations** The student develops an understanding of addition and subtraction within real-world context in order to solve problems.			**X**	**X**
K.1A, K.1C, K.1D, K.1F **K.6E**	**C4— Geometry** The student analyzes attributes of two-dimensional shapes and three-dimensional solids within real-world context to develop generalizations about their properties.		**X**		
K.1A, K.1C, K.1D, K.1F **K.7B**	**C5— Measurement** The student compares measurable attributes within real-world context.				**X**
K.1A, K.1C, K.1D, K.1F **K.8A**	**C6—Data Analysis** The student collects and organizes data to make it useful for interpreting information within real-world context.			**X**	**X**

Learning Progression for Competency 1: Problem Solving

The student analyzes word problems by determining the important information, utilizing a strategy, creating multiple representations, communicating mathematical thinking (may be oral), and determining an answer.

Developing	Progressing	Proficient
Identify information needed to solve the problem Represent the **values** of the problem using objects or pictures of objects	Create and use **teacher-selected** representations to organize or record and communicate mathematical thinking such as: • number sentence • various types of manipulatives • various types of pictorial representations • graphs Use **teacher-selected strategies** to solve a problem such as: • count objects or picture of objects • number paths • number lines • ten frames • part- whole map (strip diagram) • fact strategies • graphs • estimation • one-to-one correspondence for comparisons	Create and use **self-selected multiple** representations to organize or record and communicate mathematical thinking such as: • number sentence • various types of manipulatives • various types of pictorial representations • graphs • explaining the process to solve Use **self-selected strategies** to solve a problem such as: • count objects or picture of objects • number path • number lines • ten frames • part- whole map (strip diagram) • fact strategies • graphs • estimation • one-to-one correspondence for comparisons
Explain how the objects or pictures of objects represent a number	Explain the process used to solve the problems	Justify an answer by comparing it to a predicted answer

Learning Progression for Competency 2: Numeration
The student understands how to represent and compare numbers within real-world context.

Numeration - Numbers 0-10

Developing	Progressing	Proficient
Count a set of objects and describe the amount as the last number counted Count forward and backward with and without objects Join two groups of objects and identify their combined value	Represent a number using objects or pictures of objects Count forward starting with a number other than 1 Compose numbers using: • objects • pictures Decompose numbers using: • objects • pictures	Represent a number using tools such as: • ten frames • number paths • other counting mats Write a numeral when given a set of objects or pictures Solve problems involving composing and decomposing numbers in context using: • ten frames • number paths • other counting mats Explain the process of decomposing and composing numbers in context of a real-world situation

Learning Progression for Competency 4: Geometry

The student analyzes attributes of two-dimensional shapes and three-dimensional solids within real-world context to develop generalizations about their properties.

Developing	Progressing	Proficient
Identify regular and irregular two-dimensional shapes including: • circles • triangles • rectangles • squares (special rectangles) Describe the attributes of two-dimensional shapes with language such as sides and corners. Build or draw two-dimensional shapes using a variety of materials when given the name of the shape	Classify and sort regular and irregular shapes based on their attributes regardless of how they are turned or their size Explain how shapes were classified or sorted Describe the attributes of two-dimensional shapes using both informal and formal language such as lines, vertices, and corners Describe the attributes of three-dimensional figures • flat • curved • surface • edges • vertices or corners	Identify three-dimensional solids found in the real-world • cylinder (e.g. can of soup) • cone (e.g. birthday hat) • sphere (e.g. ball) • cube (e.g. tissue box) Describe the attributes of three-dimensional figures including the two-dimensional shapes of their faces • circles • triangles • rectangles • squares Classify and sort regular and irregular real-world three-dimensional shapes based on their attributes regardless of how they are turn or their size