Eureka Math TEKS Edition Supplemental Lessons

Kindergarten Supplemental Lessons	
Module 1:	Lesson 4-1 Classify items into two predetermined categories and then create and analyze a real object graph.
	Lesson 5-1 Classify to find objects that share a pattern, color, or shape and then create and analyze a real object graph.
Module 2:	Lesson 9-1 Sort shapes as two-dimensional and three-dimensional and then create and analyze a real object graph.
Module 6:	Lesson 5-1 Compose flat shapes and then create and analyze real object graphs.
Grade 1 Supplemental Lessons	
Module 4:	Lesson 8-1 Compare and order quantities to 40 by using an open number line.
Module 6:	Lesson 4-1 Use concrete and pictorial models to solve addition word problems involving multiples of ten and single-digit numbers. (includes Extra Practice)
	Lesson 5-1 Compare and order quantities to 100 by using an open number line.
	Lesson 9-1 Compare and order quantities to 120 by using an open number line.
Grade 2 Supplemental Lessons	
Module 7:	Lesson 2-1 Organize a collection of data using a picture graph where a picture represents more than one. (includes Extra Practice)
	Lesson 4-1 Organize a collection of data using bar graphs with intervals of more than one. (includes Extra Practice)
	Lesson 6-1 Use the dollar sign and decimal point to name the value of a collection of coins.
Grade 3 Supplemental Lessons	
Module 2:	Lesson 3-1 Solve word problems involving time intervals greater than 1 hour. (includes Extra Practice)
Module 7:	Lesson 3-1 Represent and solve word problems using number lines. (includes Extra Practice)
Grade 4 Supplemental Lessons	
Module 7:	Lesson 9-1 Solve problems involving elapsed time. (includes Extra Practice)
Grade 5 Supplemental Lessons	
Module 1:	Lesson 11-1 Divide decimals by single-digit whole numbers using hundredths grid area models.
Module 2:	Lesson 7-1 Describe the meaning of parentheses in a numeric expression and evaluate.
	Lesson 7-2 Describe the meaning of brackets and find the value of numeric expressions with up to two levels of grouping. (includes Extra Practice)
	Lesson 16-1 Represent the product of decimals with tenths using hundredths grid area models.

Kindergarten
Supplement Overview

Standards:	K.8B	Use data to create real-object and picture graphs.
	K.8C	Draw conclusions from real-object and picture graphs.
Instructional Days:	**4**	

In close partnership with the Texas Education Agency, Great Minds® created *Eureka Math® TEKS Edition* to meet the urgent need for high-quality instructional materials that are appropriate for synchronous, asynchronous, and in-school learning. Schools across Texas have embraced the conceptual approach that *Eureka Math* employs to successfully address the Texas Essential Knowledge and Skills (TEKS). Based on feedback gathered from Texas teachers in the field, the *Eureka Math TEKS Edition* Kindergarten Supplement provides additional lessons that enhance the original curriculum and gives students additional opportunities to think deeply about math.

The Supplement contains lessons that address aspects of the Kindergarten TEKS in more depth. Each lesson is numbered with a dash to clearly indicate where it should be taught within the existing sequence. For example, the supplemental lesson for Module 2 Lesson 9-1 is recommended to follow Lesson 9 and precede Lesson 10. The structure of the supplemental lessons is generally the same as the existing *Eureka Math TEKS Edition* lessons.

The Kindergarten Supplement includes four lessons that provide opportunities for students to create real object graphs and analyze the collected data (**K.8B, K.8C**). The lessons are spread throughout the modules to allow students to apply sorting and counting skills as they graph. In Module 1, Lessons 4-1 and 5-1 focus on graphing objects that have been classified into categories based on various attributes. Analysis at this point in the year focuses on *how many* questions.

In Module 2 Lesson 9, students identify shapes as two- or three-dimensional and sort them into those respective groups. Lesson 9-1 revisits this sorting and takes it a step further by having students organize that sort into a real-object graph. Students also apply their knowledge of flat and solid shapes to additional sorts that result in real-object graphs. Each graph is analyzed through a series of *more than*, *less than*, and *equal to* questions.

In Module 6 Lesson 5-1, students compose a larger shape from simple shapes and trace the composed shape. Then students make a graph of the pattern blocks they used to create the larger shape. Students compare their graphs and notice trends in the data across the whole class.

Supplemental Lessons Listed by Module

Module 1:	**Lesson 4-1 Classify items into two predetermined categories and then create and analyze a real object graph.**
	Lesson 5-1 Classify to find objects that share a pattern, color, or shape and then create and analyze a real object graph.
Module 2:	**Lesson 9-1 Sort shapes as two-dimensional and three-dimensional and then create and analyze a real object graph.**
Module 6:	**Lesson 5-1 Compose flat shapes and then create and analyze real object graphs.**

EUREKA
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1 GRADE

Mathematics Curriculum

Grade 1

Supplement Overview

Standards:	1.2F	Order whole numbers up to 120 using place value and open number lines.
	1.3A	Use concrete and pictorial models to determine the sum of a multiple of ten and a one-digit number in problems up to 99.
Instructional Days:	**4**	

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The Supplement contains lessons that address aspects of the Grade 1 TEKS in more depth. Each lesson is numbered with a dash to clearly indicate where they should be taught within the existing sequence. For example, the supplemental lesson for Module 4, Lesson 8-1 is recommended to follow Lesson 8 and precede Lesson 9. The structure of the supplemental lessons is generally the same as the existing *Eureka Math TEKS Edition* lessons. However, certain supplemental lessons also offer Extra Practice, which serves as an extension to the Problem Set. Extra Practice pages are located at the end of the lesson in the Teacher Edition and also appear as editable, assignable pages on the *Eureka Math in Sync™ TEKS Edition*. The following box indicates which lessons contain Extra Practice. Teachers can choose to use Extra Practice in the way that best meets the needs of their students, such as in-class practice, homework, or assessment.

The Grade 1 Supplement includes three lessons that address ordering numbers to 120 on an open number line (**1.2F**). Module 4 Lesson 8-1 introduces the open number line by connecting it to a familiar representation, the number path. Students count collections of objects, compare their totals, and discuss how these quantities would be placed on a number path and in what order. This knowledge is then transferred to the open number line. Work on the open number line offers students the opportunity to further apply their knowledge of place value to compare and order numbers. Module 6 Lessons 5-1 and 9-1 extend this work to ordering numbers to 100 and 120 respectively.

Module 6 Lesson 4-1 is a problem-solving lesson in which students continue to work with concrete and pictorial models such as quick ten drawings to solve word problems. These word problems involve adding multiples of ten and single-digit numbers within various word problem structures.

Supplemental Lessons Listed by Module

Module 4:   **Lesson 8-1 Compare and order quantities to 40 by using an open number line.**

Module 6:   **Lesson 4-1 Use concrete and pictorial models to solve addition word problems involving multiples of ten and single-digit numbers.**
(*includes Extra Practice*)

Lesson 5-1 Compare and order quantities to 100 by using an open number line.

Lesson 9-1 Compare and order quantities to 120 by using an open number line.

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2 GRADE **Mathematics Curriculum**

Grade 2
Supplement Overview

Standards:	2.10B	Organize a collection of data with up to four categories using pictographs and bar graphs with intervals of one or more.
	2.5B	Use the cent symbol, dollar sign, and the decimal point to name the value of a collection of coins.
Instructional Days:	**4**	

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The Supplement contains lessons that address aspects of the Grade 2 TEKS in more depth. Each lesson is numbered with a dash to clearly indicate where it should be taught within the existing sequence. For example, the supplemental lesson for Module 7, Lesson 4-1, is recommended to follow Lesson 4 and precede Lesson 5. The structure of the supplemental lessons is generally the same as the existing *Eureka Math TEKS Edition* lessons. However, certain supplemental lessons also offer Extra Practice, which serves as an extension to the Problem Set. Extra Practice pages are located at the end of the lesson in the Teacher Edition and also appear as editable, assignable pages on the *Eureka Math in Sync™ TEKS Edition*. The following box indicates which lessons contain Extra Practice. Teachers can choose to use Extra Practice in the way that best meets the needs of their students, such as in-class practice, homework, or assessment.

The Grade 2 Supplement includes three lessons. Two lessons address picture graphs and bar graphs with intervals of more than one (**2.10B**). Module 7 Lesson 2-1 builds on the work with picture graphs in Lesson 2, where students analyze graphs with one-to-one correspondence. By the end of Lesson 2-1, students explore diagrams that have units of equal groups with a value greater than 1. In Lesson 4-1, students relate strip diagrams to the units or bars of scaled graphs and compare graphs with different scales. Throughout, students understand picture and bar graphs as representations of strip diagrams and apply well-practiced skip-counting strategies to analyze them. They then apply that learning to solve problems. Through problem solving, opportunities naturally surface for students to make observations, analyze, and answer comparative questions such as "How many more?" and "How many fewer?"

Students count collections of coins in Module 7 Lesson 6. Lesson 6-1 continues that work and extends it by formalizing the dollar sign and decimal point notation for naming the value of a collection of coins (**2.5B**). Students understand the decimal point as a symbol that separates the number of dollars from the number of cents in a collection. They further understand the convention that either the cent symbol or the dollar sign and decimal point, but not both simultaneously, may be used to express a monetary value.

Supplemental Lessons Listed by Module
Module 7:   **Lesson 2-1 Organize a collection of data using a picture graph where a picture represents more than one.**   (*includes Extra Practice*)   **Lesson 4-1 Organize a collection of data using bar graphs with intervals of more than one.**   (*includes Extra Practice*)   **Lesson 6-1 Use the dollar sign and decimal point to name the value of a collection of coins.**

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3 GRADE # Mathematics Curriculum

Grade 3
Supplement Overview

Standards:	3.5A	Represent one- and two-step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations.
	3.7C	Determine the solutions to problems involving addition and subtraction of time intervals in minutes using pictorial models or tools such as a 15-minute event plus a 30-minute event equals 45 minutes.
Instructional Days:	**2**	

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The Supplement contains lessons that address aspects of the Grade 3 TEKS in more depth. Each lesson is numbered with a dash to clearly indicate where it should be taught within the existing sequence. For example, the supplemental lesson for Module 2 Lesson 3-1 is recommended to follow Lesson 3 and precede Lesson 4. The structure of the supplemental lessons is generally the same as the existing *Eureka Math TEKS Edition* lessons. However, certain supplemental lessons also offer Extra Practice, which serves as an extension to the Problem Set. Extra Practice pages are located at the end of the lesson in the Teacher Edition and also appear as editable, assignable pages on *Eureka Math in Sync™ TEKS Edition*. The following box indicates which lessons contain Extra Practice. Teachers can choose to use Extra Practice in the way that best meets the needs of their students, such as in-class practice, homework, or an assessment.

The Grade 3 Supplement includes two lessons. The first lesson is recommended for inclusion in Module 2. Students are familiar with word problems involving time intervals from their previous work in Module 2 Topic A. Lesson 3-1 extends that work to include time intervals greater than 1 hour (**3.7C**). Students begin by expressing intervals of time greater than an hour by using minutes as well as hours and minutes, establishing 60 minutes as a benchmark. They then use 1 hour as a benchmark to count intervals of time forward and backward to find either a start time or a finish time. The lesson concludes with students adding and subtracting time intervals greater than an hour using data presented in a table and naming the result in either minutes or hours and minutes.

The second lesson is intended to be used in Module 7 at the end of Topic A. Module 7 Lesson 3-1 targets the use of number lines to solve one- and two-step addition and subtraction problems (**3.5A**). Strip diagrams provide a bridge to the use of number lines to represent thinking around word problems. Number lines formatted similarly to the format used for the State of Texas Assessments of Academic Readiness (STAAR) are included.

Supplemental Lessons Listed by Module
Module 2:   **Lesson 3-1 Solve word problems involving time intervals greater than 1 hour.** (***includes Extra Practice***)
Module 7:   **Lesson 3-1 Represent and solve word problems using number lines.** (***includes Extra Practice***)

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Grade 4
Supplement Overview

Standards:	4.8C	Solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate.
Instructional Days:	**1**	

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The Supplement contains one lesson that addresses aspects of the Grade 4 TEKS in more depth by engaging students in finding elapsed time beyond the hour (**4.8C**). The lesson, Module 7 Lesson 9-1, is numbered with a dash to clearly indicate where it should be taught within the existing sequence. It is intended to be taught in Module 7 after Lesson 9 and before Lessons 10 and 11. The structure of the supplemental lesson is generally the same as the existing *Eureka Math TEKS Edition* lessons. However, this supplemental lesson also offers Extra Practice, which serves as an extension to the Problem Set. Extra Practice pages are located at the end of the lesson in the Teacher Edition and also appear as editable, assignable pages on the *Great Minds in Sync*™ digital platform. Teachers can choose to use Extra Practice in the way that best meets the needs of their students, such as in-class practice, homework, or assessment.

Module 7 Lesson 9-1 is a problem-solving lesson in which the Problem Set serves as the basis for the work during Concept Development. Students work both collaboratively and independently to solve various types of word problems involving elapsed time beyond the hour. Different solution paths to the problems should be encouraged and discussed. Notes are offered to support teachers in managing complexity.

Supplemental Lessons Listed by Module
Module 7:   **Lesson 9-1 Solve problems involving elapsed time.** (*includes Extra Practice*)

Mathematics Curriculum

Grade 5
Supplement Overview

Standards:		
	5.3E	Solve for products of decimals to the hundredths, including situations involving money, using strategies based on place-value understandings, properties of operations, and the relationship to the multiplication of whole numbers.
	5.3F	Represent quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using objects and pictorial models including area models.
	5.4E	Describe the meaning of parentheses and brackets in a numeric expression.
	5.4F	Simplify numerical expressions that do not involve exponents, including up to two levels of grouping.
Instructional Days:	**6**	

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The Supplement contains lessons that address aspects of the Grade 5 TEKS in more depth. Each lesson is numbered with a dash to clearly indicate where they should be taught within the existing sequence. For example, the supplemental lessons for Module 2, Lessons 16-1 and 16-2, are recommended to follow Lesson 16 and precede Lesson 17. The structure of the supplemental lessons is generally the same as the existing *Eureka Math TEKS Edition* lessons. However, certain supplemental lessons also offer Extra Practice, which serves as an extension to the Problem Set. Extra Practice pages are located at the end of the lesson in the Teacher Edition and also appear as editable, assignable pages on the *Great Minds In Sync™* digital platform. The following box indicates which lessons contain Extra Practice. Teachers can choose to use Extra Practice in the way that best meets the needs of their students, such as in-class practice, homework, or assessment.

The Grade 5 Supplement includes three lessons that address aspects of decimal division and multiplication. Module 1 Lesson 11-1 offers a prequel to decimal division by using place value understanding that is addressed in Lesson 12. Hundredths grid area models are included to help students visualize equal groups of tenths and hundredths (**5.3F**). This learning is followed by an opportunity for students to match decimal division equations with hundredths grid area models that represent them, explaining their reasoning as they

work. Module 2 Lessons 16-1 and 16-2 address multiplication of tenths (**5.3E**). By using hundredths grid area models, students establish that when tenths are multiplied by tenths, the product may be expressed in hundredths. Students then find products of decimals with tenths by using area models and estimation to place the decimal in products to give a reasonable result.

Three lessons address order of operations for expressions with more than one level of grouping (**5.4E, 5.4F**). It should be noted that the *Eureka Math TEKS Edition* curriculum invites students to learn the order of operations by using the same conceptual instruction used to teach all other Grade 5 topics. Therefore, teachers will note the absence of a rule-based approach to this work. Instead, students begin by drawing strip diagrams to make sense of contextual word problems and then use their own work as a springboard to writing expressions. Thus, students begin to see the need for grouping symbols—both parentheses and brackets—to capture the order in which they calculated the solution. Once the need for and meanings of these symbols are established, students are then led to evaluate expressions in isolation. Module 2 Lessons 7-1 and 7-2 lead students to evaluate expressions involving whole numbers. Module 4 Lesson 25-1 offers opportunities for students to apply their knowledge of fraction operations to evaluate expressions involving fractional numbers.

Supplemental Lessons Listed by Module	
Module 1:	**Lesson 11-1 Divide decimals by single-digit whole numbers using hundredths grid area models.**
Module 2:	**Lesson 7-1 Describe the meaning of parentheses in a numeric expression and evaluate.**
	Lesson 7-2 Describe the meaning of brackets and find the value of numeric expressions with up to two levels of grouping. (***includes Extra Practice***)
	Lesson 16-1 Represent the product of decimals with tenths using hundredths grid area models.
	Lesson 16-2 Reason about the product of decimals with tenths using area models.
Module 4:	**Lesson 25-1 Describe the meaning of grouping symbols in expressions involving fractions and decimals and evaluate.**

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