DEPARTMENT of EDUCATION
Louisiana Believes

Strong Start: July 2020 Math Lesson Broadcasting

To support school systems as they plan for summer learning and ensure students are prepared for on grade level learning by August 1, 2020, the following document contains information about "critical math lessons" and television broadcasting information.

Overview

Lessons are identified in Kindergarten through Algebra I and were chosen based on:

1. the most critical content of the grade level
2. content that many students missed due to school closures

The Department, in partnership with Louisiana Public Broadcasting (LPB), Great Minds, Illustrative Math (IM), and SchoolKit, will broadcast many of the critical math lessons on LPB. These lessons will air on LPB from Monday, July 6th through Friday, July 31st on a regular daily schedule by grade level. They are also available on-demand.

To ensure accessibility for students with disabilities, broadcasts will have closed captioning and on-demand videos will be available with closed captioning and audio description.

This document includes the following information:

Student Print Materials

Parents can download and print the corresponding lessons for free.

- Great Minds Lessons: To download/print free Eureka Math curriculum materials, visit https://greatminds.org/resources/products/eureka-basic-curriculum-files. You will be prompted to set up a free account if you don't already have one.
- Illustrative Mathematics: To download/print free Illustrative Mathematics curriculum materials, visit im.kendallhunt.com or https://learnzillion.com/p/illustrative-mathematics/.

School systems and schools can purchase student materials for these lessons from the vendors below.

	Vendor Name	Information	Contact
K-5 Eureka Materials	Great Minds	Pricing	jaime.courtright@greatminds.org
6-Algebra I IM Materials	LearnZillion	Pricing	KatherineMorgan@learnzillion.com
	Kendall Hunt	Pricing	proth@kendallhunt.com
	McGraw Hill	Pricing	sallie.patton@mheducation.com
	OpenUp Resources	Pricing	angie.jennings@openup.org

Watching LPB Television Broadcasts (Contact: Nancy Tooraen, ntooraen@lpb.org)

Broadcasts will be available on your local LPB station, WLPB-DT - Baton Rouge (Channel 27-1 on most televisions), KLPA-DT - Alexandria (Channel 25-1 on most televisions), KLPB-DT - Lafayette (Channel 24-1 on most televisions), KLTL-DT - Lake Charles (Channel 18-1 on most televisions), KLTS-DT - Shreveport (Channel 17-1 on most televisions), KLTM-DT - Monroe (Channel 13-1 on most televisions), WYES (Channel 12-1 on most televisions)

LPB Broadcasting Schedule For Math Lessons			
Days	**Grade Level**	**Time**	**Lessons from the following Eureka Math modules:**
Tuesdays & Thursdays	Kindergarten	12:00pm	Module 5: Numbers 10–20 and Counting to 100
	1st Grade	12:30pm	Module 4: Place Value, Comparison, Addition and Subtraction to 40
	2nd Grade	1:00pm	Module 6: Foundations of Multiplication and Division
Mondays, Wednesdays, & Fridays	3rd Grade	12:00pm	Module 5: Fractions as Numbers on the Number Line
	4th Grade	12:30pm	Module 6: Decimal Fractions
	5th Grade	1:00pm	Module 5: Addition and Multiplication with Volume and Area
Days	**Grade Level**	**Time**	**Lessons from the following Illustrative Math units:**
Monday - Friday	6th Grade	1:30pm	Unit 2: Introducing Ratios Unit 3: Unit Rates and Percentages Unit 6: Expressions and Equations Unit 7: Rational Numbers
	7th Grade	2:00pm	Unit 2: Introducing Proportional Relationships Unit 5: Rational Number Arithmetic Unit 6: Expressions, Equations, and Inequalities
	8th Grade	2:30pm	Unit 4: Linear Equations and Linear Systems Unit 5: Functions and Volume Unit 6: Associations in Data Unit 7: Exponents and Scientific Notation
	Algebra I	3:00pm	Unit 6: Introduction to Quadratic Functions Unit 7: Quadratic Equations

Watching On-Demand

Eureka videos are available on-demand on the Great Minds website.
Illustrative Math videos are available on-demand on the School Kit website (detailed below).

- Grade 6: http://schoolkitgroup.com/**video-grade-6/**
- Grade 7: http://schoolkitgroup.com/**video-grade-7/**
- Grade 8: http://schoolkitgroup.com/**video-grade-8/**
- Algebra: http://schoolkitgroup.com/**video-algebra/**

Lesson Details

Kindergarten Eureka Math Module 5: Numbers 10–20 and Counting to 100		
Critical Lesson	**Lesson Description**	**Broadcast Date**
1	Count straws into piles of ten; count the piles as 10 ones.	
2	Count 10 objects within counts of 10 to 20 objects, and describe as 10 ones and __ ones.	July 7th
3	Count and circle 10 objects within images of 10 to 20 objects and describe as 10 ones and ___ ones.	
4	Count straws the Say Ten way to 19; make a pile for each ten.	July 9th
5	Count straws the Say Ten way to 20; make a pile for each ten.	
6	Model with objects and represent numbers 10 to 20 with place value or Hide Zero cards.	July 14th
7	Model and write numbers 10 to 20 as number bonds.	July 16th
8	Model teen numbers with materials from abstract to concrete.	July 21st
9	Draw teen numbers from abstract to pictorial.	July 23rd
13	Show, count, and write to answer how many questions in linear and array configurations.	July 28th
15	Count up and down by tens to 100 with Say Ten and regular counting.	July 30th
16	Count within tens by ones.	

17	Count across tens when counting by ones through 40.	
20	Represent teen number compositions and decompositions as addition sentences.	
21	Represent teen number decompositions as 10 ones and some ones, and find a hidden part.	
22	Decompose teen numbers as 10 ones and some ones; compare some ones to compare the teen numbers.	
23	Reason about and represent situations, decomposing teen numbers into 10 ones and some ones, and composing 10 ones and some ones into a teen number.	

1st Grade Eureka Math Module 4: Place Value, Comparison, Addition and Subtraction to 40		
Critical Lesson	**Lesson Description**	**Broadcast Date**
1	Compare the efficiency of counting by ones and counting by tens.	
2	Use the place value chart to record and name tens and ones within a two-digit number.	July 7th
3	Interpret two-digit numbers as either tens and some ones or as all ones.	
4	Write and interpret two-digit numbers as addition sentences that combine tens and ones.	July 9th
5	Identify 10 more, 10 less, 1 more, and 1 less than a two-digit number.	
6	Use dimes and pennies as representations of tens and ones.	
7	Compare two quantities, and identify the greater or lesser of the two given numerals.	July 14th
8	Compare quantities and numerals from left to right.	
9	Use the symbols >, =, and < to compare quantities and numerals.	July 16th
10	Use the symbols >, =, and < to compare quantities and numerals.	
11	Add and subtract tens from a multiple of 10.	July 21st
12	Add tens to a two-digit number.	
13	Use counting on and the make ten strategy when adding across a ten.	July 23rd
14	Use counting on and the make ten strategy when adding across a ten.	

15	Use single-digit sums to support solutions for analogous sums to 40.	
16	Add ones and ones or tens and tens.	July 28th
17	Add ones and ones or tens and tens.	
23	Interpret two-digit numbers as tens and ones, including cases with more than 9 ones.	
24	Add a pair of two-digit numbers when the ones digits have a sum less than or equal to 10.	July 30th
25	Add a pair of two-digit numbers when the ones digits have a sum less than or equal to 10.	
26	Add a pair of two-digit numbers when the ones digits have a sum greater than 10.	
27	Add a pair of two-digit numbers when the ones digits have a sum greater than ten.	
28	Add a pair of two-digit numbers with varied sums in the ones.	
29	Add a pair of two-digit numbers with varied sums in the ones.	

2nd Grade Eureka Math Module 6: Foundations of Multiplication and Division		
Critical Lesson	**Lesson Description**	**Broadcast Date**
1	Use manipulatives to create equal groups.	
2	Use math drawings to represent equal groups, and relate to repeated addition.	July 7th
3	Use math drawings to represent equal groups, and relate to repeated addition.	
4	Represent equal groups with tape diagrams, and relate to repeated addition.	July 9th
5	Compose arrays from rows and columns, and count to find the total using objects.	July 14th
6	Decompose arrays into rows and columns, and relate to repeated addition.	July 16th
7	Represent arrays and distinguish rows and columns using math drawings.	
8	Create arrays using square tiles with gaps.	
9	Solve word problems involving addition of equal groups in rows and columns.	July 21st
10	Use square tiles to compose a rectangle, and relate to the array model.	
11	Use square tiles to compose a rectangle, and relate to the array model.	

12	Use math drawings to compose a rectangle with square tiles.	
13	Use square tiles to decompose a rectangle.	
14	Use scissors to partition a rectangle into same-size squares, and compose arrays with the squares.	
15	Use math drawings to partition a rectangle with square tiles, and relate to repeated addition.	
17	Relate doubles to even numbers, and write number sentences to express the sums.	July 23rd
18	Pair objects and skip-count to relate to even numbers.	July 28th
19	Investigate the pattern of even numbers: 0, 2, 4, 6, and 8 in the ones place, and relate to odd numbers.	July 30th

3rd Grade Eureka Math Module 5: Fractions as Numbers on the Number Line		
Critical Lesson	**Lesson Description**	**Broadcast Date**
3	Specify and partition a whole into equal parts, identifying and counting unit fractions by drawing pictorial area models.	July 6th
4	Represent and identify fractional parts of different wholes.	
5	Partition a whole into equal parts and define the equal parts to identify the unit fraction numerically.	July 8th
6	Build non-unit fractions less than one whole from unit fractions.	July 10th
7	Identify and represent shaded and non-shaded parts of one whole as fractions.	July 13th
8	Represent parts of one whole as fractions with number bonds.	July 15th
9	Build and write fractions greater than one whole using unit fractions.	July 17th
10	Compare unit fractions by reasoning about their size using fraction strips.	July 20th
11	Compare unit fractions with different sized models representing the whole.	July 22nd
14	Place unit fractions on a number line with endpoints 0 and 1.	
15	Place any fraction on a number line with endpoints 0 and 1.	July 24th
16	Place whole number fractions and unit fractions between whole numbers on the number line.	July 27th

17	Practice placing various fractions on the number line.	July 29th
20	Recognize and show that equivalent fractions have the same size, though not necessarily the same shape.	
21	Recognize and show that equivalent fractions refer to the same point on the number line.	July 31st
22	Generate simple equivalent fractions by using visual fraction models and the number line.	
23	Generate simple equivalent fractions by using visual fraction models and the number line.	
24	Express whole numbers as fractions and recognize equivalence with different units.	
25	Express whole number fractions on the number line when the unit interval is 1.	
26	Decompose whole number fractions greater than 1 using whole number equivalence with various models.	
28	Compare fractions with the same numerator pictorially.	
29	Compare fractions with the same numerator using <, >, or = and use a model to reason about their size.	

4th Grade Eureka Math Module 6: Decimal Fractions		
Critical Lesson	**Lesson Description**	**Broadcast Date**
1	Use metric measurement to model the decomposition of one whole into tenths.	July 6th
2	Use metric measurement and area models to represent tenths as fractions greater than 1 and decimal numbers.	July 8th
3	Represent mixed numbers with units of tens, ones, and tenths with number disks, on the number line, and in expanded form.	July 10th
4	Use meters to model the decomposition of one whole into hundredths. Represent and count hundredths.	July 13th
5	Model the equivalence of tenths and hundredths using the area model and number disks.	July 15th
6	Use the area model and number line to represent mixed numbers with units of ones, tenths, and hundredths in fraction and decimal forms.	July 17th
9	Use the place value chart and metric measurement to compare decimals and answer	July 20th

	comparison questions.	
10	Use area models and the number line to compare decimal numbers, and record comparisons using <, >, and =.	July 22th
11	Compare and order mixed numbers in various forms.	July 24nd
12	Apply understanding of fraction equivalence to add tenths and hundredths.	July 27th
13	Add decimal numbers by converting to fraction form.	July 29th
14	Solve word problems involving the addition of measurements in decimal form.	July 31st
15	Express money amounts given in various forms as decimal numbers.	
16	Solve word problems involving money.	

5th Grade Eureka Math Module 5: Addition and Multiplication with Volume and Area		
Critical Lesson	**Lesson Description**	**Broadcast Date**
1	Explore volume by building with and counting unit cubes.	July 6th
2	Find the volume of a right rectangular prism by packing with cubic units and counting.	July 8th
3	Compose and decompose right rectangular prisms using layers.	July 10th
4	Use multiplication to calculate volume.	July 13th
6	Find the total volume of solid figures composed of two non-overlapping rectangular prisms.	July 15th
7	Solve word problems involving the volume of rectangular prisms with whole number edge lengths.	July 17th
10	Find the area of rectangles with whole-by-mixed and whole-by-fractional number side lengths by tiling, record by drawing, and relate to fraction multiplication.	July 20th
11	Find the area of rectangles with mixed-by-mixed and fraction-by-fraction side lengths by tiling, record by drawing, and relate to fraction multiplication.	July 22th
12	Measure to find the area of rectangles with fractional side lengths.	July 24nd
13	Multiply mixed number factors, and relate to the distributive property and area model.	July 27th
14	Solve real world problems involving area of figures with fractional side lengths using visual	July 29th

	models and/or equations.	
15	Solve real world problems involving area of figures with fractional side lengths using visual models and/or equations.	July 31st

6th Grade Illustrative Mathematics Units 2, 3, 6, 7				
Unit	**Number of Critical Lessons**	**Broadcast Lessons**	**Lesson Title(s)**	**Broadcast Date**
2 Introducing Ratios	17	3 and 5	Recipes and Defining Equivalent Ratios	July 6th
		6	Introducing Double Number Line Diagrams	July 7th
		8 and 9	How Much for One? and Constant Speed	July 8th
		11 and 12	Representing Ratios with Tables and Navigating a Table of Equivalent Ratios	July 9th
3 Unit Rate and Percentages	16	4	Converting Units	July 10th
		5	Comparing Speeds and Prices	July 13th
		11	Percentages and Double Number Lines	July 14th
		15	Finding This Percent of That	July 15th
		16	Finding the Percentage	July 16th
6 Expressions and Equations	16	1	Tape Diagrams and Equations	July 17th
		2	Truth and Equations	July 20th
		4	Practice Solving Equations and Representing Situations with Equations	July 21st
		6	Write Expressions Where Letters Stand for Numbers	July 22nd
		8	Equal and Equivalent	July 23rd
		9	The Distributive Property, Part 1	July 24th

		10	The Distributive Property, Part 2	July 27th
		16 and 17	Two Related Quantities, Part 1 and Part 2	July 28th
7 Rational Numbers	18	1	Positive and Negative Numbers	July 29th
		2	Points on the Number Line	July 30th
		3	Comparing Positive and Negative Numbers	July 31st

7th Grade Illustrative Mathematics Units 2, 5, 6				
Unit	**Number of Critical Lessons**	**Broadcast Lessons**	**Lesson Title(s)**	**Broadcast Date**
2 Introducing Proportional Relationships	15	4	Proportional Relationships and Equations	July 6th
		6	Using Equations to Solve Problems	July 7th
		7	Comparing Relationships with Tables	July 8th
		8	Comparing Relationships with Equations	July 9th
		10	Introducing Graphs of Proportional Relationships	July 10th
		11	Interpreting Graphs of Proportional Relationships	July 13th
		12	Using Graphs to Compare Relationships	July 14th
5 Rational Number Arithmetic	17	1 and 2	Interpreting Negative Numbers	July 15th
		3 and 4	Changing Elevation	July 16th
		5	Representing Subtraction	July 17th
		6	Subtracting Rational Numbers	July 20th
		8	Position, Speed, and Direction	July 21st
		9	Multiplying Rational Numbers	July 22nd
		11	Dividing Rational Numbers	July 23rd

		13 and 14	Expressions with Rational Numbers and Solving Problems with Rational Numbers	July 24th
6 Expressions, Equations, and Inequalities	22	10	Different Options for Solving One Equation	July 27th
		11	Using Equations to Solve Problems	July 28th
		18	Subtraction in Equivalent Expressions	July 29th
		20	Combining Like Terms (Part 1)	July 30th
		21	Combining Like Terms (Part 2)	July 31st

8th Grade Illustrative Mathematics Units 4, 5, 6, 7				
Unit	**Number of Critical Lessons**	**Broadcast Lessons**	**Lesson Title(s)**	**Broadcast Date**
4 Linear Equations and Linear Systems	16	3	Balanced Moves	July 6th
		4 and 5	More Balanced Moves	July 7th
		9 and 10	When Are They the Same?	July 8th
		12	Systems of Equations	July 9th
		13 and 14	Solving Systems of Equations	July 10th
		15	Writing Systems of Equations	July 13th
5 Functions and Volume	17	2 and 3	Introduction to Functions and Equations for Functions	July 14th
		4	Tables, Equations	July 15th
		5	More Graphs of Functions	July 16th
		8	Linear Functions	July 17th
		9 and 10	Linear Models	July 20th
		3	What a Point in a Scatter Plot Means	July 21st

6 Associations in Data	10	4	Fitting a Line to Data	July 22nd
		5	Describing Trends in Scatter Plots	July 23rd
		6	The Slope of a Fitted Line	July 24th
7 Exponents and Scientific Notation	16	2	Multiplying Powers of Ten	July 27th
		3	Powers of Powers of 10	July 28th
		4	Dividing Powers of 10	July 29th
		5 and 6	Negative Exponents with Powers of 10 and What about Other Bases?	July 30th
		8	Combining Bases	July 31st

Algebra I Illustrative Mathematics Units 6, 7				
Unit	**Number of Critical Lessons**	**Broadcast Lessons**	**Lesson Title(s)**	**Broadcast Date**
6 Introduction to Quadratic Functions	16	1	A Different Kind of Change	July 6th
		2	How Does it Change?	July 7th
		3	Building Quadratic Functions from Geometric Patterns	July 8th
		4	Comparing Quadratic and Exponential Functions	July 9th
		5	Building Quadratic Functions to Describe Situations (Part 1)	July 10th
		6	Building Quadratic Functions to Describe Situations (Part 2)	July 13th
		8	Equivalent Quadratic Expressions	July 14th
		9	Standard Form and Factored Form	July 15th
		10	Graphs of Functions in Standard and Factored Forms	July 16th

		11	Graphing from the Factored Form	July 17th
		14	Graphs That Represent Situations	July 20th
7 Quadratic Equations	24	2	When and Why Do We Write Quadratic Equations?	July 21st
		4	Solving Quadratic Equations with the Zero Product Property	July 22nd
		5	How Many Solutions?	July 23rd
		6	Rewriting Quadratic Expressions in Factored Form (Part 1)	July 24th
		7	Rewriting Quadratic Expressions in Factored Form (Part 2)	July 27th
		8	Rewriting Quadratic Expressions in Factored Form (Part 3)	July 28th
		9	Solving Quadratic Equations by Using Factored Form	July 29th
		11	What are Perfect Squares?	July 30th
		12	Completing the Square (Part 1)	July 31st