Curriculum Map: 2nd Grade Math (2025)

Course: 2nd Grade Math Sub-topic: General

Grade(s): 2

Course Description: In second-grade math, students will develop a solid foundation of Mathematical relationship among numbers. Instructional time should focus on four critical areas: (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes and partitioning them into equal-sized pieces (halves, quarters and thirds) while developing an understanding that the more pieces in the whole, the smaller the piece.

Course Textbooks, Workbooks, Materials Citations:

District approved curriculum

i-Ready math computer program

Manipulatives such as base ten blocks, clocks, play money, 3D and 2D shapes and geo-boards.

Rocket math and 99 math through Clever for fluency practice

Blooket game for review of concepts such as counting coins, telling time, or shapes

District approved websites

Unit: Unit 1 Sums and differences to 20

Timeline: Week 2 to 4

Unit Description: Students will use mental strategies to add and subtract. The students will learn and use the following

	strategies: fact families, doubles, near doubles, counting on, and counting back. Students will become fluent with adding and subtracting to 20.
Unit Essential Questions:	Am I able to fluently add and subtract to 20 using mental strategies?
Unit Big Ideas:	Apply properties of operations as strategies to add and subtract.
Unit Materials:	district approved math series i-Ready 99 math Rocket Math whiteboards supplemental materials
Unit Assignments:	Use a spiral review
Unit Key Terminology & Definitions:	add addend sum

count on

doubles

near doubles

count back

difference

subtract

missing addend

fact family

STANDARDS: **STANDARDS**

STATE: PA Core Standards (2014)

CC.2.2.2.A.2 (Advanced) Use mental strategies to add and subtract within 20.

This Curriculum Map Unit has no Topics to display

Unit: Unit 2: Place value, counting, and comparison of numbers of 1000

Timeline: Week 5 to 6

Unit Description: Students will understand place value by representing numbers in different ways. They will be able to compare numbers to 1000 as well as skip count by different numbers.

Unit Essential Questions:

Am I able to count numbers by ones, 2s, 5s, 10s, and 100s?

Am I able to represent numbers to 1000 using concrete models, drawings, words, and numbers?

Am I able to compare numbers to 1000?

Am I able to understand the place value of a number?

Unit Big Ideas: Use place-value concepts to represent 100s, 10s, and 1s up to 1000.

Unit Materials:

district approved math series

i-Ready

base ten blocks

Work Mat: chart

supplemental materials

Abcya place value games

https://polypad.amplify.com/p (website that has manipulatives)

Unit Assignments: Use a spiral review

Unit Key Terminology & Definitions:

ones

tens

hundreds

thousands

place value

digit

expanded form

word form

standard form

compare

greater than

less than

equal to

STANDARDS:

STANDARDS

STATE: PA Core Standards (2014)

CC.2.1.2.B.1 (Advanced)	Use place-value concepts to represent amounts of tens and ones and to compare three digit numbers.
CC.2.1.2.B.2	Use place-value concepts to read, write, and skip count to 1000.

(Advanced)

Topic:

Unit: Unit 3: Addition and subtraction of numbers to 100

Timeline: Week 7 to 9

Unit Description: Students will be able to add and subtract 2 digit numbers with and without regrouping.

Unit Essential Questions: Am I able to represent and solve addition and subtraction problems, including word problems, within 100?

Unit Big Ideas: Students will be able to add and subtract 2 digit numbers with and without regrouping.

Unit Materials:

district approved math series

i-Ready

99 math

Rocket math

polypad

whiteboards

supplemental materials

Unit Assignments: Use a spiral review

Unit Key Terminology & Definitions:

add

subtract

sum

difference

regroup

STANDARDS:

STANDARDS

STATE: PA Core Standards (2014)

CC.2.2.2.A.1 (Advanced) Represent and solve problems involving addition and subtraction within 100.

This Curriculum Map Unit has no Topics to display

Unit: Unit 4: Counting money

Timeline: Week 13 to 14

Unit Description: Students will be able to recognize coins and know their value. Students will also be able to count coins and paper currency as well as make change.

Unit Essential Questions:

How do you find the value of a group of coins, bills or a combination of the two?

How will solving addition and subtraction problems involving money be important in everyday life?

Unit Big Ideas: Students will be able to count coins and currency and will be able to make change. They will use concrete models and drawings.

Unit Materials:

District approved math series

i-Ready

polypad

play money

whiteboards

blooket

supplemental materials

Unit Assignments: use a spiral review

Unit Key Terminology & Definitions:

quarter

nickel

dime

penny

cent

dollar

dollar sign ($)

change

STANDARDS:

STANDARDS

STATE: PA Core Standards (2014)

CC.2.4.2.A.3 (Advanced)	Solve problems and make change using coins and paper currency with appropriate symbols.

This Curriculum Map Unit has no Topics to display

Unit: Unit 5: Data Analysis

Timeline: Week 14 to 15

Unit Description: Students will be able to represent and interpret data using line plots, picture graphs, and bar graphs.

Unit Essential Questions:

Am I able to create a graph using a survey or set data?

Am I able to interpret different graphs?

Unit Big Ideas: Students will be able to interpret and create different graphs using surveys and given data.

Unit Materials:

District approved math series

i-Ready

graph paper

clipboards

supplemental materials

Unit Assignments:

use a spiral review

cross curricular

Unit Key Terminology & Definitions:

Bar graph

picture graph

table

tally marks

line plot

symbol

key

data

survey

STANDARDS: **STANDARDS**

STATE: PA Core Standards (2014)

CC.2.4.2.A.4 (Advanced) Represent and interpret data using line plots, picture graphs, and bar graphs.

This Curriculum Map Unit has no Topics to display

Unit: Unit 6: Time

Timeline: Week 17 to 18

Unit Description: Students will be able to tell and write time to the nearest five minutes using an analog or digital clock.

Unit Essential Questions: Am I able to tell time on a digital or analog clock in 5 min. intervals?

Am I able to tell whether it is AM or PM when telling time?

Unit Big Ideas:	Students will be able to tell time to the nearest 5 minutes on a digital and analog clock.
Unit Materials:	district approved math series i-Ready clocks whiteboards blooket supplemental materials
Unit Assignments:	use a spiral review
Unit Key Terminology & Definitions:	analog clock digital clock hour hand hour minute hand minute quarter hour

half hour

half past

A.M.

P.M.

STANDARDS: **STANDARDS**

STATE: PA Core Standards (2014)

CC.2.4.2.A.2 (Advanced)	Tell and write time to the nearest five minutes using both analog and digital clocks.

This Curriculum Map Unit has no Topics to display

Unit: Unit 7: Customary and Metric Lengths

Timeline: Week 19 to 21

Unit Description: Students will be able to measure and estimate lengths using Customary and Metric units with appropriate tools. Students will be able to choose the appropriate tool while measuring.

Unit Essential Questions: Am I able to use measurement tools and understand a "unit" of measurement?

Am I able to understand when to estimate and when to use exact measurements?

Am I able to understand the relationship between the size of the unit and the number of units needed to

cover a given length?

Unit Big Ideas: Students will be able to measure and estimate lengths in standard customary and Metric units using appropriate tools.

Unit Materials:

District Approved Math Series

i-Ready

rulers

yardsticks

tape measures

supplemental materials

connecting cubes

number lines

Unit Assignments:

use a spiral review

cross curricular

Unit Key Terminology & Definitions:

length

inch

estimate

measure

foot

yard

mile

centimeter

meter

kilometer

ruler

yardstick

tape measure

STANDARDS:

STANDARDS

STATE: PA Core Standards (2014)

CC.2.4.2.A.1 (Advanced)	Measure and estimate lengths in standard units using appropriate tools.
CC.2.4.2.A.6 (Advanced)	Extend the concepts of addition and subtraction to problems involving length.

This Curriculum Map Unit has no Topics to display

Unit: Unit 8: Geometric Shapes and Fractions

Timeline: Week 21 to 22

Unit Description:

Students will be able to identify 2D and 3D shapes and understand their attributes.

Students will be able to partition shapes into halves, quarters, and thirds.

Unit Essential Questions:

Am I able to identify, describe and draw two and three dimensional shapes?

Am I able to partition shapes into two, three or four equal shares?

Am I able to recognize 2D and 3D attributes, such as angles and faces?

Unit Big Ideas: Students will be able to identify and draw two and three dimensional shapes having specified attributes. Students will be able to partition shapes into 2, 3, or 4 equal shares.

Unit Materials:

school district math series

i-Ready

2D and 3D shapes

	geoboards
	fraction circles or squares
	connecting cubes
	supplemental material
	blooket
Unit Assignments:	use a spiral review
	cross curricular
Unit Key Terminology & Definitions:	two-dimensional shape
	parallelogram
	trapezoid
	pentagon
	hexagon
	side
	angle
	quadrilateral

square

circle

rectangle

three-dimensional shape

cube

sphere

cone

cylinder

pyramid

rectangular prism

face

edge

vertex

halves

thirds

fourths

partition

STANDARDS: **STANDARDS**

STATE: PA Core Standards (2014)

CC.2.3.2.A.1 (Advanced)	Analyze and draw two- and three-dimensional shapes having specified attributes.
CC.2.3.2.A.2 (Advanced)	Use the understanding of fractions to partition shapes into halves, quarters, and thirds.

This Curriculum Map Unit has no Topics to display

Unit: Unit 9: Number Patterns

Timeline: Week 23 to 24

Unit Description:

Students will be able skip count and identify odd and even numbers.

Students will be able to work with equal groups and repeated addition for a foundation of multiplication.

Unit Essential Questions:

Am I able to make equal groups of objects and count them?

Am I able to partition a set into equal groups?

Am I able to arrange a group of objects into an array?

Am I able to count by 2, 5, 10, 100 starting with any number?

Unit Big Ideas: The students will be able to use patterns to find missing numbers. They will also be able to use groups to

do repeated addition which will help prepare them for multiplication and division.

Unit Materials:

district approved math series

i-Ready

supplemental materials

blooket

Unit Assignments:

use a spiral review

Unit Key Terminology & Definitions:

patterns

array

equal group

repeated addition

odd

even

skip count

STANDARDS: **STANDARDS**

STATE: PA Core Standards (2014)

CC.2.2.2.A.3 (Advanced) Work with equal groups of objects to gain foundations for multiplication.

This Curriculum Map Unit has no Topics to display

Unit: Unit 10: Addition and subtraction to 1000

Timeline: Week 25 to 31

Unit Description: Students will be able to add and subtract three digit numbers with and without regrouping.

Unit Essential Questions: Am I able to represent and solve addition and subtraction problems, including word problems, within 1000?

Unit Big Ideas: Students will be able to add and subtract 3 digit numbers with and without regrouping.

Unit Materials:

district approved math series

i-Ready

99 math

rocket math

supplemental materials

whiteboards

Unit Assignments: Use a spiral review

Unit Key Terminology & Definitions:

add

subtract

regroup

sum

difference

STANDARDS:

STANDARDS

STATE: PA Core Standards (2014)

CC.2.1.2.B.3 (Advanced)	Use place-value understanding and properties of operations to add and subtract within 1000.

This Curriculum Map Unit has no Topics to display

Unit:

This Curriculum Map Unit has no Topics to display