WARREN COUNTY SCHOOL DISTRICT

PLANNED INSTRUCTION

COURSE DESCRIPTION

Course Title: Mathematics Grade 2
Course Number: 08223

Course Description: In Grade 2, 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.

Suggested Grade Level: Grade 2
Length of Course: Two Semesters
Units of Credit: None
PDE Certification and Staffing Policies and Guidelines (CSPG) Required Teacher Certifications:
CSPG 69 Grades PK-4
To find the CSPG information, go to CSPG
Certification verified by the WCSD Human Resources Department: ☒Yes ☐No

WCSD STUDENT DATA SYSTEM INFORMATION

Course Level: Academic
Mark Types: Check all that apply.
☒F – Final Average ☒MP – Marking Period ☐EXM – Final Exam

GPA Type: ☒ GPAEL-GPA Elementary ☐ GPAML-GPA for Middle Level ☐ NHS-National Honor Society
☐ UGPA-Non-Weighted Grade Point Average ☐ GPA-Weighted Grade Point Average

State Course Code: 02032
To find the State Course Code, go to State Course Code, download the Excel file for *SCED*, click on SCED 6.0 tab, and chose the correct code that corresponds with the course.

TEXTBOOKS AND SUPPLEMENTAL MATERIALS

Board Approved Textbooks, Software, and Materials:

Title:	envision Math 2nd Grade
Publisher:	Pearson
ISBN #:	978-0-76-857343-5
Copyright Date:	2020
WCSD Board Approval Date:	3/8/2021

Supplemental Materials: Manipulatives, ST Math

Curriculum Document

WCSD Board Approval:

Date Finalized:	1/18/2021
Date Approved:	3/8/2021
Implementation Year:	2020-2021

SPECIAL EDUCATION, 504, and GIFTED REQUIREMENTS

The teacher shall make appropriate modifications to instruction and assessment based on a student's Individual Education Plan (IEP), Chapter 15 Section 504 Plan (504), and/or Gifted Individual Education Plan (GIEP).

SCOPE AND SEQUENCE OF CONTENT, CONCEPTS, AND SKILLS

Performance Indicator	PA Core Standard and/or Eligible Content	Month Taught and Assessed for Mastery
Use place-value concepts to represent amounts of tens and ones and to compare three-digit numbers.	**2.1 2.B.1**	October
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.	2.1 2.B.1	October
Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons	2.1 2.B.1	October
Use place value concepts to read, write, and skip-count to 1,000.	**2.1 2.B.2**	March
Count within 1,000; skip-count by 5s, 10s, and 100s.	2.1 2.B.2	March
Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form.	2.1 2.B.2	March
Use place-value understanding and properties of operations to add and subtract within 1,000.	**2.1 2.B.3**	March April
Use place-value and properties of operations to add and subtract	2.1 2.B.3	March April
Add up to four two-digit numbers using strategies based on place-value and properties of operations.	2.1 2.B.3	March April
Add and subtract within 1,000 (understanding that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones, and sometimes it is necessary to compose or decompose tens or hundreds).	2.1 2.B.3	March April
Explain why addition and subtraction strategies work using place-value and the properties of operations.	2.1 2.B.3	March April
Mentally add 10 or 100 to a given number from 100–900, and mentally subtract 10 or 100 from a given number from 100–900.	2.1 2.B.3	May
Represent and solve problems involving addition and subtraction within 100.	**2.2 2.A.1**	November December
Use addition and subtraction within 100 to solve one- and two-step word problems by using drawings and equations with a symbol for the unknown number to represent the problem	2.2 2.A.1	November December
Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20	2.2 2.A.1	November December
Add and subtract within 20 using various strategies. (e.g., counting on, making ten, decomposing a number leading to a ten, using the relationship between addition and subtraction, and creating equivalent but easier or known sums)	2.2 2.A.1	November December
Apply properties of operations as strategies to add and subtract. (e.g., commutative property of addition, associative property of addition)	2.2 2.A.1	November December
Make sense of a word problem and understand what it is asking for	2.2 2.A.1	November December

Performance Indicator	**PA Core Standard and/or Eligible Content**	**Month Taught and Assessed for Mastery**
Understand subtraction as an unknown addend problem. (e.g., subtract 10 – 8 by finding the number that makes 10 when added to 8)	2.2 2.A.1	September
Look for patterns. (e.g., making ten, fact families, doubles)	2.2 2.A.1	September
Practice mathematical communication skills.	2.2 2.A.1	September
Use mental strategies to add and subtract within 20.	**2.2 2.A.2**	September
Fluently add and subtract within 20 using mental strategies.	2.2 2.A.2	September
Realize that doing mathematics involves solving problems and discussing how the problems were solved.	2.2 2.A.2	September
Explain the meaning of a problem and look for ways to solve it.	2.2 2.A.2	September
Practice mathematical communication skills.	2.2 2.A.2	September
Work with equal groups of objects to gain foundations for multiplication.	**2.2 2.A.3**	October
Determine whether a group of objects (up to 20) has an odd or even number of members.	2.2 2.A.3	October
Write an equation to express an even number as a sum of two equal addends	2.2 2.A.3	October
Use addition to find the total number of objects arranged in rectangular arrays with up to five rows and up to five columns; write an equation to express the total as a sum of equal addends.	2.2 2.A.3	October
Identify and describe the rule for a patter	2.2 2.A.3	October
Use a rule to extend a pattern	2.2 2.A.3	October
Understand multiplication as repeated addition and arrays.	2.2 2.A.3	October
Use concrete objects and pictures to help solve problems.	2.2 2.A.3	November
Realize that doing mathematics involves solving problems and discussing the solutions.	2.2 2.A.3	November
Use concrete objects or pictures to help conceptualize and solve problems	2.2 2.A.3	November
Decide to solve a problem by drawing a picture rather than writing an equation.	2.2 2.A.3	November
Analyze and draw two- and three-dimensional shapes having specified attributes.	**2.3 2.A.1**	May
Recognize and draw shapes having specified attributes.	2.3 2.A.1	May
Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	2.3 2.A.1	May
Describe, classify, and sort plane and solid geometric shapes according to the number and shape of faces and the number of sides, edges, and/or vertices.	2.3 2.A.1	May
Recognize and represent geometric shapes and solids in structures in the environment.	2.3 2.A.1	May
Manipulate, draw, construct, and represent (e.g., on a geoboard) two-dimensional shapes.	2.3 2.A.1	May

Performance Indicator	**PA Core Standard and/or Eligible Content**	**Month Taught and Assessed for Mastery**
Name characteristics of two-dimensional shapes and three-dimensional figures.	2.3 2.A.1	May
Describe the similarities and differences between two two-dimensional shapes or two three-dimensional figures	2.3 2.A.1	May
Use the understanding of fractions to partition shapes into halves, quarters, and thirds.	**2.3 2.A.2**	May
Partition circles, squares, and rectangles into two, three, or four equal shares.	2.3 2.A.2	May
Recognize that equal shares of identical wholes need not have the same shape.	2.3 2.A.2	May
Match the fraction to the corresponding model. (e.g., concrete and/or pictorially)	2.3 2.A.2	May
Represent a given fraction using drawings or concrete materials.	2.3 2.A.2	May
Measure and estimate lengths in standard units using appropriate tools.	**2.4 2.A.1**	April
Measure the length of an object by selecting and using appropriate tools. (e.g., rulers, yardsticks, meter sticks, measuring tapes)	2.4 2.A.1	April
Measure the same length with different sized units and note the measurement made with the smaller unit is more than the measurement made with the larger unit and vice versa.	2.4 2.A.1	April
Estimate lengths using units of inches, feet, centimeters, and meters.	2.4 2.A.1	April
Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	2.4 2.A.1	April
Practice mathematical communication skills.	2.4 2.A.1	April
Select the appropriate tool.	2.4 2.A.1	April
Tell and write time to the nearest five minutes using both analog and digital clocks	**2.4 2.A.2**	
Tell and write time from analog and digital clocks to the nearest five minutes.	2.4 2.A.2	March
Develop mathematical communication skills.	2.4 2.A.2	March
Solve problems and make change using coins and paper currency with appropriate symbols	**2.4 2.A.3**	March
Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately.	2.4 2.A.3	March
Use the context of money to find sums and differences less than or equal to 100. (e.g., using the numbers 0 to 100)	2.4 2.A.3	March
Add and subtract to solve one- and twostep word problems involving money situations. (e.g., adding to, taking from, putting together, taking apart, comparing)	2.4 2.A.3	March
Use drawings and equations with a symbol for the unknown number to represent the problem.	2.4 2.A.3	March

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Performance Indicator	**PA Core Standard and/or Eligible Content**	**Month Taught and Assessed for Mastery**
Learn the relationships between the values of a penny, nickel, dime, quarter, and dollar bill.	2.4 2.A.3	March
Practice mathematical communication skills.	2.4 2.A.3	March
Decide to solve a problem by drawing a picture rather than writing an equation.	2.4 2.A.3	March
Represent and interpret data using line plots, picture graphs, and bar graphs.	**2.4 2.A.4**	May
Make a line plot to show measurement data of the lengths of several objects to the nearest whole-number unit.	2.4 2.A.4	May
Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories.	2.4 2.A.4	May
Solve simple put-together, take apart, and compare problems using information presented in a graph.	2.4 2.A.4	May
Describe features of data such as range, mode, and median.	2.4 2.A.4	May
Practice mathematical communication skills.	2.4 2.A.4	May
Decide when certain graphs might be better suited than others.	2.4 2.A.4	May
Extend the concepts of addition and subtraction to problems involving length.	**2.4 2.A.6**	April May
Measure the length of an object by selecting and using appropriate tools. (e.g., rulers, yardsticks, meter sticks, measuring tapes)	2.4 2.A.6	April May
Estimate lengths using units of inches, feet, centimeters, and meters.	2.4 2.A.6	April May
Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit	2.4 2.A.6	April May
Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories	2.4 2.A.6	April May
Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, and 2, and represent whole-number sums and differences within 100 on a number line diagram.	2.4 2.A.6	April May

ASSESSMENTS

PSSA Academic Standards, Assessment Anchors, and Eligible Content: The teacher must be knowledgeable of the PDE Academic Standards, Assessment Anchors, and Eligible Content and incorporate them regularly into planned instruction.

Formative Assessments: The teacher will utilize a variety of assessment methods to conduct in-process evaluations of student learning.

Effective formative assessments for this course include: center activities, cooperative learning activities, games, online activities, oral responses, teacher observations, and worksheets.

Summative Assessments: The teacher will utilize a variety of assessment methods to evaluate student learning at the end of an instructional task, lesson, and/or unit.

Effective summative assessments for this course include: performance assessments, projects, tests, and quizzes.