

## WARREN COUNTY SCHOOL DISTRICT

### PLANNED INSTRUCTION

#### **COURSE DESCRIPTION**

**Course Title:** Mathematics 2

**Course Number:** 08322

**Course Prerequisites:** None

**Course Description:** In Grade 2, instructional time focuses 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 or Elementary

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 choose the correct code that corresponds with the course.

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#### **TEXTBOOKS AND SUPPLEMENTAL MATERIALS**

##### **Board Approved Textbooks, Software, and Materials:**

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

**Supplemental Materials:** Manipulatives, ST Math, flashcards, mCLASS

#### **Curriculum Document**

##### **WCSD Board Approval:**

**Date Finalized:** 7-/20/2022  
**Date Approved:** [Click or tap to enter a date.](#)  
**Implementation Year:** 2022-2023

#### **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 AND CONCEPTS**

**Marking Period 1**

Fluently Add and Subtract within twenty  
Work with Equal Groups  
Add Within 100 Using Strategies  
Fluently Add Within 100

**Marking Period 2**

Subtract Within 100 Using Strategies  
Fluently Subtract Within 100

**Marking Period 3**

More Solving Problems Involving Addition and Subtraction  
Work with Time and Money  
Numbers to 1,000  
Add within 1,000 Using Models and Strategies

**Marking Period 4**

Subtract within 1,000 using models and strategies  
Measuring Length  
Shapes and Their Attributes  
More Addition, Subtraction and Length  
Graphs and Data

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**Standards/Eligible Content and Skills**

<b>Performance Indicator</b>	<b>PA Core Standard and/or Eligible Content</b>	<b>Marking Period Taught</b>
<b>Use place-value concepts to represent amounts of tens and ones and to compare three-digit numbers.</b>	<b>2.1 2.B.1</b>	MP3
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.	2.1 2.B.1	MP3
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	MP3
<b>Use place value concepts to read, write, and skip-count to 1,000.</b>	<b>2.1 2.B.2</b>	MP3
Count within 1,000; skip-count by 5s, 10s, and 100s.	2.1 2.B.2	MP3
Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form.	2.1 2.B.2	MP3
<b>Use place-value understanding and properties of operations to add and subtract within 1,000.</b>	<b>2.1 2.B.3</b>	MP3
Use place-value and properties of operations to add and subtract.	2.1 2.B.3	MP3
Add up to four two-digit numbers using strategies based on place-value and properties of operations.	2.1 2.B.3	MP3
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	MP3
Explain why addition and subtraction strategies work, using place-value and the properties of operations.	2.1 2.B.3	MP3
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	MP3
<b>Represent and solve problems involving addition and subtraction within 100.</b>	<b>2.2 2.A.1</b>	MP2
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	MP2
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	MP1
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	MP1
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	MP1

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Make sense of a word problem and understand what it is asking for.	2.2 2.A.1	MP1
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	MP1
Look for patterns. (e.g., making ten, fact families, doubles).	2.2 2.A.1	MP1
Practice mathematical communication skills.	2.2 2.A.1	MP1
<b>Use mental strategies to add and subtract within 20.</b>	<b>2.2 2.A.2</b>	MP1
Fluently add and subtract within 20 using mental strategies.	2.2 2.A.2	MP1
Realize that doing mathematics involves solving problems and discussing how the problems were solved.	2.2 2.A.2	MP1
Explain the meaning of a problem and look for ways to solve it.	2.2 2.A.2	MP1
Practice mathematical communication skills.	2.2 2.A.2	MP1
<b>Work with equal groups of objects to gain foundations for multiplication.</b>	<b>2.2 2.A.3</b>	MP1
Determine whether a group of objects (up to 20) has an odd or even number of members.	2.2 2.A.3	MP1
Write an equation to express an even number as a sum of two equal addends.	2.2 2.A.3	MP1
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	MP1
Identify and describe the rule for a pattern.	2.2 2.A.3	MP1
Use a rule to extend a pattern.	2.2 2.A.3	MP1
Understand multiplication as repeated addition and arrays.	2.2 2.A.3	MP1
Use concrete objects and pictures to help solve problems.	2.2 2.A.3	MP1
Realize that doing mathematics involves solving problems and discussing the solutions.	2.2 2.A.3	MP1
Use concrete objects or pictures to help conceptualize and solve problems.	2.2 2.A.3	MP1
Decide to solve a problem by drawing a picture rather than writing an equation.	2.2 2.A.3	MP1
<b>Analyze and draw two- and three-dimensional shapes having specified attributes.</b>	<b>2.3 2.A.1</b>	MP4
Recognize and draw shapes having specified attributes.	2.3 2.A.1	MP4
Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	2.3 2.A.1	MP4
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	MP4
Recognize and represent geometric shapes and solids in structures in the environment.	2.3 2.A.1	MP4
Manipulate, draw, construct, and represent (e.g., on a geoboard) two-dimensional shapes.	2.3 2.A.1	MP4
Name characteristics of two-dimensional shapes and three-dimensional figures.	2.3 2.A.1	MP4
Describe the similarities and differences between two two-dimensional shapes or two three-dimensional figures.	2.3 2.A.1	MP4

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<b>Use the understanding of fractions to partition shapes into halves, quarters, and thirds.</b>	<b>2.3 2.A.2</b>	MP4
Partition circles, squares, and rectangles into two, three, or four equal shares.	2.3 2.A.2	MP4
Recognize that equal shares of identical wholes need not have the same shape.	2.3 2.A.2	MP4
Match the fraction to the corresponding model (e.g., concrete and/or pictorially).	2.3 2.A.2	MP4
Represent a given fraction using drawings or concrete materials.	2.3 2.A.2	MP4
<b>Measure and estimate lengths in standard units using appropriate tools.</b>	<b>2.4 2.A.1</b>	MP4
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	MP4
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	MP4
Estimate lengths using units of inches, feet, centimeters, and meters.	2.4 2.A.1	MP4
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	MP4
Practice mathematical communication skills.	2.4 2.A.1	MP4
Select the appropriate tool.	2.4 2.A.1	MP4
<b>Tell and write time to the nearest five minutes using both analog and digital clocks.</b>	<b>2.4 2.A.2</b>	MP3
Tell and write time from analog and digital clocks to the nearest five minutes.	2.4 2.A.2	MP3
Develop mathematical communication skills.	2.4 2.A.2	MP3
<b>Solve problems and make change using coins and paper currency with appropriate symbols.</b>	<b>2.4 2.A.3</b>	MP3
Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.	2.4 2.A.3	MP3
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	MP3
Add and subtract to solve one- and two-step word problems involving money situations (e.g., adding to, taking from, putting together, taking apart, comparing).	2.4 2.A.3	MP3
Use drawings and equations with a symbol for the unknown number to represent the problem.	2.4 2.A.3	MP3
Learn the relationships between the values of a penny, nickel, dime, quarter, and dollar bill.	2.4 2.A.3	MP3
Practice mathematical communication skills.	2.4 2.A.3	MP3
Decide to solve a problem by drawing a picture rather than writing an equation.	2.4 2.A.3	MP3
<b>Represent and interpret data using line plots, picture graphs, and bar graphs.</b>	<b>2.4 2.A.4</b>	MP4
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	MP4

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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	MP4
Solve simple put-together, take apart, and compare problems using information presented in a graph.	2.4 2.A.4	MP4
Describe features of data such as range, mode, and median.	2.4 2.A.4	MP4
Practice mathematical communication skills.	2.4 2.A.4	MP4
Decide when certain graphs might be better suited than others.	2.4 2.A.4	MP4
<b>Extend the concepts of addition and subtraction to problems involving length.</b>	<b>2.4 2.A.6</b>	MP4
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	MP4
Estimate lengths using units of inches, feet, centimeters, and meters.	2.4 2.A.6	MP4
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	MP4
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	MP4
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	MP4

## **ASSESSMENTS**

**PDE 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, writing, 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, writing, tests, and quizzes.