

**WARREN COUNTY SCHOOL DISTRICT**

PLANNED INSTRUCTION

**COURSE DESCRIPTION**

**Course Title:** Mathematics 7

**Course Number:** 00204

**Course Prerequisites:** Completion of Mathematics – Grade 6, 60% year average and basic operations without calculator usage

**Course Description:** In Mathematics Grade 7, instructional time will focus on 5 critical areas; proportional relationships, understanding and applying operations to rational numbers, creating and solving expressions, equations, and inequalities, describing and implementing geometric relationships in real world applications, drawing inferences about populations, and developing, using, and evaluating probability models. A District-wide final exam is required.

**Suggested Grade Level:** Grade 7

**Length of Course:** Two Semesters

**Units of Credit:** 1

**PDE Certification and Staffing Policies and Guidelines (CSPG) Required Teacher Certifications:**

-CSPG #53 Middle Level Mathematics, CSPG#50 Mathematics (7-12) CSPG #70 Grades 4-8 (All subjects 4-6, Mathematics 7-8)

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:** 02037

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.

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**TEXTBOOKS AND SUPPLEMENTAL MATERIALS**

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

**Title:** envision Math2.0 Grade 7  
**Publisher:** Pearson  
**ISBN #:** 978-0-328-88094-2  
**Copyright Date:** 2017  
**WCSD Board Approval Date:** 6/29/2020

**Supplemental Materials:** [Click or tap here to enter text.](#)

**Curriculum Document**

**WCSD Board Approval:**

**Date Finalized:** 6/5/2020  
**Date Approved:** 6/29/2020  
**Date(s) Revised:** 1/11/2021  
**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).

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**SCOPE AND SEQUENCE OF CONTENT, CONCEPTS, AND SKILLS**

<b>Performance Indicator</b>	<b>PA Core Standard and/or Eligible Content</b>	<b>Month Taught and Assessed for Mastery</b>
<b>THE NUMBER SYSTEM</b>		<b>August September</b>
Relate integers and their opposites	7.NS.A.1a	Choose an item. Choose an item.
Understand rational numbers	7.NS.A.1b, 7.NS.A.1d	Choose an item. Choose an item.
Add integers	7.NS.A.1c, 7.NS.A.1d	Choose an item. Choose an item.
Subtract integers	7.NS.A.1c, 7.NS.A.1d	Choose an item. Choose an item.
Add and subtract rational numbers	7.NS.A.1b, 7.NS.A.1c, 7.NS.A.1d	Choose an item. Choose an item.
Multiply integers	7.NS.A.2a, 7.NS.A.2c	Choose an item. Choose an item.
Multiply rational numbers	7.NS.A.2a, 7.NS.A.2c	Choose an item. Choose an item.
Divide integers	7.NS.A.2a, 7.NS.A.2c	Choose an item. Choose an item.
Divide rational numbers	7.NS.A.2a, 7.NS.A.2c	Choose an item. Choose an item.
Solve problems with rational numbers	7.NS.A.3, 7E.B.3	Choose an item. Choose an item.
<b>RATIOS AND PROPORTIONS</b>		<b>October</b>
Connect Ratios, Rates, and Unit Rates	7.RP.A.1, 7.RP.A.3	Choose an item. Choose an item.
Determine unit rates with ratios of fractions	7.RP.A.1, 7.RP.A.3	Choose an item. Choose an item.
Understand proportional relationships: equivalent ratios	7.RP.A.2a	Choose an item. Choose an item.
Describe proportional relationships: constant of proportionality	7.RP.A.2b, 7.RP.A.2c	Choose an item. Choose an item.
Graph proportional relationships	7.RP.A.2a, 7.RP.A.2b, 7.RP.A.2d	Choose an item. Choose an item.
Apply proportional reasoning to solve problems	7.RP.A.2, 7.RP.A.3	Choose an item. Choose an item.
<b>PERCENTS</b>		<b>November</b>
Analyze percent of numbers	7.RP.A.3	Choose an item. Choose an item.
Connect percent and proportion	7.RP.A.2c, 7.RP.A.3	Choose an item. Choose an item.

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Represent and use the percent equation	7.RP.A.2c, 7.RP.3	Choose an item. Choose an item.
Solve percent change and percent error problems	7.RP.A.3	Choose an item. Choose an item.
Solve markup and markdown problems	7.RP.A.3	Choose an item. Choose an item.
Solve simple interest problems	7.RP.A.3	Choose an item. Choose an item.
<b>EQUATIONS</b>		<b>December January</b>
Write and evaluate algebraic expressions	7.EE.B.3, 7.EE.B.4	Choose an item. Choose an item.
Generate equivalent expressions	7.EE.A.1	Choose an item. Choose an item.
Simplify expressions	7.EE.A.1	Choose an item. Choose an item.
Expand expressions	7.EE.A.1, 7.EE.A.2	Choose an item. Choose an item.
Factor expressions	7.EE.A.1, 7.EE.A.2	Choose an item. Choose an item.
Add expressions	7.EE.A.1, 7.EE.A.2	Choose an item. Choose an item.
Subtract expressions	7.EE.A.1, 7.EE.A.2	Choose an item. Choose an item.
Analyze equivalent expressions	7.EE.A.2	Choose an item. Choose an item.
<b>EQUATIONS AND INEQUALITIES</b>		<b>January February</b>
Write Two-Step Equations	7.EE.B.4	Choose an item. Choose an item.
Solve Two-Step Equations	7.EE.B.3, 7.EE.B.4a	Choose an item. Choose an item.
Solve Equations Using the Distributive Property	7.EE.B.3, 7.EE.B.4a	Choose an item. Choose an item.
Solve Inequalities Using Addition or Subtraction	7.EE.B.4b	Choose an item. Choose an item.
Solve Inequalities Using Multiplication or Division	7.EE.B.4b	Choose an item. Choose an item.
Solve Two-Step Inequalities	7.EE.B.4b	Choose an item. Choose an item.
Solve Multi-Step Inequalities	7.EE.B.4b	Choose an item. Choose an item.
<b>DRAW INFERENCES ABOUT POPULATIONS</b>		<b>February</b>
Populations and Samples	7.SP.A.1	Choose an item. Choose an item.
Draw Inferences from Data	7.SP.A.1, 7.SP.A.2, 7.RP.A.2c	Choose an item. Choose an item.
Make Comparative Inferences About Populations	7.SP.B.3, 7.SP.B.4	Choose an item. Choose an item.

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<b>Performance Indicator</b>	<b>PA Core Standard and/or Eligible Content</b>	<b>Month Taught and Assessed for Mastery</b>
Make More Comparative Inferences About Populations	7.SP.B.3, 7.SP.B.4	Choose an item. Choose an item.
<b>PROBABILITY</b>		<b>March</b>
Understand Likelihood and Probability	7.SP.C.5, 7.EE.B.3	Choose an item. Choose an item.
Understand Theoretical Probability	7.SP.C.6, 7.RP.A.2c	Choose an item. Choose an item.
Understand Experimental Probability	7.SP.C.6, 7.SP.C.7	Choose an item. Choose an item.
Use Probability Models	7.SP.C.7a, 7.SP.C.7b, 7.EE.B.3	Choose an item. Choose an item.
Determine Outcomes of Compound Events	7.SP.C.8b	Choose an item. Choose an item.
Find Probabilities of Compound Events	7.SP.C.8a	Choose an item. Choose an item.
Simulate Compound Events	7.SP.C.8c	Choose an item. Choose an item.
<b>SOLVE PROBLEMS INVOLVING GEOMETRY</b>		<b>April</b>
Solve Problems Involving Scale Drawings	7.G.A.1	Choose an item. Choose an item.
Draw Geometric Figures	7.G.A.2	Choose an item. Choose an item.
Draw Triangles with Given Conditions	7.G.A.2	Choose an item. Choose an item.
Solve Problems Using Angle Relationships	7.G.B.5	Choose an item. Choose an item.
Solve Problems Involving Circumference of a Circle	7.G.B.4, 7.EE.B.4a	Choose an item. Choose an item.
Solve Problems Involving Area of a Circle	7.G.B.4, 7.EE.B.3, 7.EE.B.4a	Choose an item. Choose an item.
Describe Cross Sections	7.G.B.4	Choose an item. Choose an item.
Solve Problems Involving Surface Area	7.G.B.6., 7.NS.A.3, 7.EE.B.3, 7.EE.B.4a	Choose an item. Choose an item.
Solve Problems Involving Volume	7.GB.6, 7.NS.A.3, 7.EE.B.3, 7.EE.B.4a	Choose an item. Choose an item.

## **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: Suggested but not limited to: Bell-ringers, exit ticket, cooperative learning, observations, centers, written work, quizzes, oral response, self-evaluation, peer evaluation, homework and projects**

**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: Suggested but not limited to: Performance assessments, Chapter/unit tests, projects, Final Exam**