#### PLANNED INSTRUCTION

COURSE DESCRIPTION	)N
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Course Title: Grade 8 Math Elective

**Course Number:** 00279 **Course Prerequisites:** None

Course Description: Through online software and project based learning students will focus on the

math concepts of exponents, solving equations, functions, writing linear equations, angles and triangles, transformations and similarity, and data sets.

**Suggested Grade Level**: Grade 8 **Length of Course:** One Semester

**Units of Credit:** .5

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

CSPG - Middle level Math or Secondary Math 7-12

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.

 $\boxtimes$ F – Final Average  $\boxtimes$ MP – Marking Period  $\square$  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: 02999

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

#### PLANNED INSTRUCTION

### **TEXTBOOKS AND SUPPLEMENTAL MATERIALS**

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

Title: Get More Math

Publisher:Click or tap here to enter text.ISBN #:Click or tap here to enter text.Copyright Date:Click or tap here to enter text.

WCSD Board Approval Date: 6/29/2020

**Supplemental Materials:** Click or tap here to enter text.

## **Curriculum Document**

**WCSD Board Approval:** 

Date Finalized:6/5/2020Date Approved:6/29/2020Implementation 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).

PLANNED INSTRUCTION

# SCOPE AND SEQUENCE OF CONTENT, CONCEPTS, AND SKILLS

Performance Indicator	PA Core Standard and/or Eligible Content	Month Taught and Assessed for Mastery
Exponents	CC.2.2.8.B.1	September February
Multiplying and Dividing Exponents		
Powers of Exponents		
Negative Exponents		
Scientific Notation with Positive Powers of 10		
Scientific Notation Operations		
Square Roots and Cube Roots		
Solving Equations	CC.2.2.8.B.1 CC.2.2.8.B.2 CC.2.2.8.B.3	September February
Two-Step Equations		
Equations with Variables on Both Sides		
Equations with Rational Numbers		
Equations Simplify		
Equations with Infinite or No Solutions		
Apply Equations to Solve Word Problems		
Functions	CC.2.2.8.C.1 CC.2.2.8.C.2	October March
Introduction to Functions		
Identify Function from Table		
Identify Function from Graph		
Domain and Range		
Writing Linear Equations	CC.2.2.8.B.1 CC.2.2.8.B.2 CC.2.2.8.B.3	October March
Writing Linear Equations Given Slope and y-Intercept		
Writing Linear Equations Given Graph		
Writing Linear Equations Given Table		
Apply the Concept of Writing Linear Equations to Word Problems		

### PLANNED INSTRUCTION

Angles and Triangles	CC.2.3.8.A3	November April
Parallel Lines Cut by a Transversal		
Triangle Sum Theorem		
Exterior Angle Theorem		
The Pythagorean Theorem		
Converse of Pythagorean Theorem		
Distance Between Two Points		
Transformations/Similarities	CC.2.3.8.A.2	November April
Properties of Translations		
Properties of Reflections		
Properties of Rotations		
Congruent Figures		
Transformations and Verbal Descriptions		
Properties of Dilations		
Similar Figures		
Volume and Surface Area	CC.2.3.8.A.1	December May
Volume of Cylinders		
Volume of Cones		
Volume of Spheres		
Volume of Cylinders, Cones, and Spheres		
Data Sets	CC.2.4.8.B.1 CC.2.4.8.B.2	January May
Scatter Plots		
Two-Way Frequency Tables		
Two-Way Relative Frequency Tables		

#### PLANNED INSTRUCTION

# **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: Get More Math

**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: Projects