**COURSE DESCRIPTION**

**Course Title:** Mathematics Grade 6

**Course Number:** 00203

**Course Prerequisites:** Completion of mathematics grade 5

|  |  |
| --- | --- |
| **Course Description:** | In Grade 6, instructional time will focus on four critical areas: (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking |

**Suggested Grade Level**: Grade 6

**Length of Course:** Two Semesters

**Units of Credit:** None

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

CSPG #53 Middle Level Mathematics, CSPG# 41 Elementary Education, CSPG #70 Grades 4-8 (All subjects 4-6, Mathematics 7-8)

To find the CSPG information, go to [CSPG](https://www.education.pa.gov/Educators/Certification/Staffing%20Guidelines/Pages/default.aspx)

**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**: 02036

To find the State Course Code, go to [State Course Code](https://nces.ed.gov/forum/sced.asp), 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:**  enVisionmath 2.0 Grade 6

**Publisher:** Pearson

**ISBN #:**  978-0-328-88090-4

**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

**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** |
| Fluently add, subtract, multiply, and divide decimals | CC.2.1.6.E.2 | Choose an item.  September |
| Fluently divide whole numbers and decimals | CC.2.1.6.E.2 | September  Choose an item. |
| Multiply fractions | CC.2.1.6.E.1 | Choose an item.  September |
| Understand division with fractions | CC.2.1.6.E.2 | Choose an item.  September |
| Divide fractions by fractions | CC.2.1.6.E.1 | September  Choose an item. |
| Divide mixed numbers | CC.2.1.6.E.1 | Choose an item.  September |
| Solve problems with rational numbers | CC.2.1.6.E.1 | Choose an item.  September |
| Understand integers | CC2.1.6.E.4 | September  October |
| Represent rational numbers on a number line | CC2.1.6.E.4 | September  October |
| Absolute values of rational numbers | CC2.1.6.E.4 | September  October |
| Represent rational numbers on the coordinate plane | CC2.1.6.E.4 | September  October |
| Find distances on the coordinate plane | CC2.1.6.E.4 | September  October |
| Represent polygons on the coordinate plane | CC2.1.6.E.4, CC2.3.6.A.1 | September  October |
| Understand and represent exponents | CC.2.2.6.B.1 | October  November |
| Find GCF and LCM | CC.2.1.6.E.3 | October  November |
| Write and evaluate numerical expressions | CC.2.2.6.B.1 | November  October |
| Write algebraic expressions | CC.2.2.6.B.1 | October  November |
| Evaluate algebraic expression | CC.2.2.6.B.1 | October  November |
| Generate equivalent expressions | CC.2.2.6.B.1 | October  November |
| Simplify algebraic expressions | CC.2.2.6.B.1 | October  November |
| Understand equations and solutions | CC.2.2.6.B.2 | November  Choose an item. |
| Apply properties of equality | CC.2.2.6.B.2 | November  Choose an item. |
| Write and solve addition and subtraction equations | CC.2.2.6.B.2 | November  Choose an item. |

|  |  |  |
| --- | --- | --- |
| Write and solve multiplication and division equations | CC.2.2.6.B.2 | November  Choose an item. |
| Write and solve equations with rational numbers | CC.2.2.6.B.2 | November  December |
| Understand and write inequalities | CC.2.2.6.B.2 | November  December |
| Solve inequalities | CC.2.2.6.B.2 | November  December |
| Understand independent and dependent variables | CC.2.2.6.B.3 | November  December |
| Use patters to write and solve equations | CC.2.2.6.B.3 | November  December |
| Relate tables, graphs, and equations | CC.2.2.6.B.3 | November  December |
| Understand ratios | CC.2.1.6.D.1 | January  Choose an item. |
| Generate equivalent ratios | CC.2.1.6.D.1 | January  Choose an item. |
| Compare ratios | CC.2.1.6.D.1 | January  Choose an item. |
| Represent and graph ratios | CC.2.1.6.D.1 | January  Choose an item. |
| Understand rates and unit rates | CC.2.1.6.D.1 | January  Choose an item. |
| Ratio reasoning; convert customary units | CC.2.1.6.D.1 | January  Choose an item. |
| Ratio reasoning; convert metric units | CC.2.1.6.D.1 | January  Choose an item. |
| Relate customary and metric units | CC.2.1.6.D.1 | January  Choose an item. |
| Understand Percent | CC.2.1.6.D.1 | January  February |
| Relate fractions, decimals, and percents | CC.2.1.6.D.1 | January  February |
| Represent percents greater than 100 and less than 1 | CC.2.1.6.D.1 | January  February |
| Estimate to find percent | CC.2.1.6.D.1 | January  February |
| Find percent of a number | CC.2.1.6.D.1 | January  February |
| Find the whole given a part and the percentage | CC.2.1.6.D.1 | January  February |
| Find area of parallelograms and rhombuses | CC.2.3.6.A.1 | February  Choose an item. |
| Solve triangle area problems | CC.2.3.6.A.1 | February  Choose an item. |
| Find areas of trapezoids and kites | CC.2.3.6.A.1 | February  Choose an item. |
| Find area of polygons | CC.2.3.6.A.1 | February  Choose an item. |
| Represent solid figures using nets | CC.2.3.6.A.1 | February  Choose an item. |

|  |  |  |
| --- | --- | --- |
| Find Surface areas of prisms | CC.2.3.6.A.1 | February  Choose an item. |
| Find surface areas of pyramids | CC.2.3.6.A.1 | February  Choose an item. |
| Find volume with fractional edge lengths | CC.2.3.6.A.1 | February  Choose an item. |
| Recognize statistical questions | CC.2.4.6.B.1 | March  Choose an item. |
| Summarize data using mean, median, mode, range | CC.2.4.6.B.1 | March  Choose an item. |
| Display data in box plots | CC.2.4.6.B.1 | March  Choose an item. |
| Display data in frequency tables and histograms | CC.2.4.6.B.1 | March  Choose an item. |
| Summarize data using measures of variability | CC.2.4.6.B.1 | Choose an item.  March  Choose an item. |
| Choose appropriate statistical measures | CC.2.4.6.B.1 | March |
| Summarize data distribution | CC.2.4.6.B.1 | March  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, oral response, self-evaluation, peer evaluation, quizzes, worksheets, 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, quizzes, and projects