**COURSE DESCRIPTION**

**Course Title:** Mathematics Kindergarten

**Course Number:** 08023

**Course Description:** In kindergarten, instructional time focuses on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; (2) describing shapes and space. More learning time in kindergarten is devoted to numbers than to other topics.

**Suggested Grade Level**: Kindergarten

**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](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**: 02030

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 8.0 tab, and chose the correct code that corresponds with the course.

**TEXTBOOKS AND SUPPLEMENTAL MATERIALS**

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

**Title:**  enVisionmath Kindergarten

**Publisher:** Pearson

**ISBN #:**  9780768573411

**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:** 2021-2022

**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** |
| --- | --- | --- |
| **Know number names, and write and recite the count sequence.** | **2.1.K.A.1** | January |
| Count to 100. | 2.1.K.A.1 | January |
| Count forward beginning from a given number within a known sequence. | 2.1.K.A.1 | December  January |
| Name numerals 0-20. | 2.1.K.A.1 | December |
| Represent a number of objects with a written numeral 0-20. | 2.1.K.A.1 | December |
| Recognize that a number represents a specific quantity. | 2.1.K.A.1 | October  February |
| Connect the quantity to a written symbol. | 2.1.K.A.1 | October |
| Continually check work by asking questions. | 2.1.K.A.1 | October |
| **Apply one-to-one correspondence to count the number of objects.** | **2.1 K.A.2** | December |
| Use one –to-one correspondence when counting to 20. | 2.1.K.A.2 | December |
| State the total number of objects counted, demonstrating understanding that last number named tells the number of objects counted. | 2.1.K.A.2 | October |
| Understand each successive number name refers to a quantity that is one larger when added to the given number. | 2.1.K.A.2 | October |
| Solve addition and subtraction work problems, and add and subtract within 10 by using objects or drawings to represent the problem. | 2.1.K.A.2 | March |
| Recognize that a number represents a specific quantity. | 2.1.K.A.2 | February |
| Continually check work by asking questions | 2.1.K.A.2 | January  May |
| **Apply the concept of magnitude to compare numbers and quantities.** | **2.1 K.A.3** | October  November |
| Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. (e.g., using matching and counting strategies) | 2.1 K.A.3 | October  November |
| Compare two numbers between 1 and 10 presented as written numerals. | 2.1 K.A.3 | October  November |
| Develop mathematical communication skills. | 2.1 K.A.3 | October  November |
| Use clear and precise language and discussions to justify own reasoning | 2.1 K.A.3 | October  November |
| **Use place-value to compose and decompose numbers within 19.** | **2.1 K.B.1** | April |
| Compose and decompose numbers up to 19 into ten and ones by using objects or drawings.   * Record each composition or decomposition by a drawing or equation. | 2.1 K.B.1 | April |
| Continually check work by asking questions. (e.g., “Does this make sense?”) | 2.1 K.B.1 | April |
| Begin to discern a pattern or structure that exists in teen numbers. | 2.1 K.B.1 | April |
| **Extend the concepts of putting together and taking apart to add and subtract within 10.** | **2.2 K.A.1** | February  March |
| Represent addition and subtraction. (e.g., with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations) | 2.2 K.A.1 | February  March |
| Decompose numbers less than or equal to 1 into pairs in more than one way, by using objects or drawings.   * Record each decomposition through a drawing or equation. | 2.2 K.A.1 | February  March |
| Find the number that makes 10, for any number from 1 to 9, when added to the given number. | 2.2 K.A.1 | February  March |
| Solve addition and subtraction word problems, and add and subtract within 10, by using objects, drawings, or equations. | 2.2 K.A.1 | February  March |
| Begin to discern a pattern or structure in equations of addition and subtraction. | 2.2 K.A.1 | February  March |
| Experiment with representing problem situations in multiple ways including numbers, words (e.g. mathematical language), drawing pictures, using objects, acting out, making a chart or list, creating equations, etc. | 2.2 K.A.1 | February  March |
| Connect the different representations and explain the connections. | 2.2 K.A.1 | February  March |
| **Identify and describe two-and three-dimensional shapes.** | **2.3 K.A.1** | September |
| Identify shapes as two-dimensional or three-dimensional. | 2.3 K.A.1 | September |
| Name shapes regardless of their orientations or overall size. | 2.3 K.A.1 | September |
| Use simple shapes to compose larger shapes. | 2.3 K.A.1 | September |
| Compare two representations side-by-side and explain their connections. | 2.3 K.A.1 | September  October |
| Use clear and precise language in discussions with others and in own reasoning. | 2.3 K.A.1 | September  October |
| **Analyze, compare, create, and compose two- and three-dimensional shapes** | **2.3 K.A.2** | October |
| Describe objects in the environment using names of shapes. | 2.3 K.A.2 | October |
| Describe the relative positions of objects using appropriate terms. (e.g., above, below, beside, in front, behind, next to) | 2.3 K.A.2 | October |
| Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts, and other attributes | 2.3 K.A.2 | September  October |
| Model shapes in the world by building shapes. | 2.3 K.A.2 | October |
| Construct arguments using concrete referents. (e.g., objects, pictures, drawing, and actions) | 2.3 K.A.2 | October |
| Develop mathematical communication skills as they participate in mathematical discussions. | 2.3 K.A.2 | September  October |
| **Describe and compare attributes of length, area, weight, and capacity of everyday objects.** | **2.4 K.A.1** | May |
| Describe measurable attributes of objects. (e.g., length, weight, area, or capacity) | 2.4 K.A.1 | May |
| Describe several measurable attributes of a single object. | 2.4 K.A.1 | May |
| Compare two objects with a measureable attribute in common. | 2.4 K.A.1 | May |
| Consider the available tools (including estimation) when solving a mathematical problem | 2.4 K.A.1 | May |
| Decide when certain tools might be helpful. | 2.4 K.A.1 | May |
| **Classify objects and count the number of objects in each category.** | **2.4 K.A.4** | February |
| Classify up to 20 objects into categories using one attribute.   * Display the number of objects in each category. * Count and compare the quantities of each category. * Describe the difference | 2.4 K.A.4 | February |
| Construct arguments using concrete objects to classify items. (e.g., ask “Why is this true?” “Does this make sense?”) | 2.4 K.A.4 | February |
| Connect the different representations and explain the connections. | 2.4 K.A.4 | February |

**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.