

OREGON GRADE K MATHEMATICS

GRADE LEVEL GUIDANCE



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OREGON MATH PROJECT

The Oregon Math Project (OMP) advances mathematics education in our state by cultivating a network of educators that promotes equitable math experiences for all students through guidance and the support of policies, standards, curricula, assessments, and instructional best practices. Realizing the vision of math education in Oregon includes ensuring that all students attain mathematics proficiency by having access to high-quality instruction that includes challenging and coherent content in a learning environment where each student receives the support they need to succeed in mathematics.

Please [visit the OMP website](#) to learn more about the project and opportunities to connect with this work.

CLARIFYING DOCUMENTS

The intent of clarifying statements is to provide additional guidance for educators to communicate the intent of the [2021 Oregon math standards](#) to support the future development of aligned curricular resources and assessments.

Clarifying statements can be in the form of succinct sentences or paragraphs that attend to one of four types of clarifications: (1) Student Experiences; (2) Examples; (3) Boundaries; and (4) Connection to Math Practices.

Please [use this form to provide suggestions](#) to the Oregon Math Standards and/or Guidance document.

Questions, comment, or suggestions can also be emailed to: ODE.MathProject@ode.oregon.gov

Grade K Overview

Critical Areas of Focus

In Kindergarten, instructional time should focus on two critical areas:

1. Representing and comparing whole numbers, initially with sets of objects;
2. Describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.

Link to summary of [Grade K Critical Areas](#)

Students should spend the large majority of their time on the major work of the grade (■). Supporting work (□) and, where appropriate, additional work (●) can engage students in the major work of the grade.

At least 65% and up to approximately 85% of class time, with Grades K–2 nearer the upper end of that range, should be devoted to the major work of the grade. For more information, see the [K-8 major work of the grade developed by Student Achievement Partners](#)

DOMAINS AND CLUSTERS

K.OA - Algebraic Reasoning: Operations

- K.OA.A Understand addition and subtraction

K.NCC - Numeric Reasoning: Counting and Cardinality

- K.NCC.A Know number names and the count sequence
- K.NCC.B Count to tell the number of objects.
- K.NCC.C Compare numbers.

K.NBT - Numeric Reasoning: Base Ten Arithmetic

- K.NBT.A Work with numbers 11-19 to gain foundations for place value

K.GM - Geometric Reasoning and Measurement

- K.GM.A Identify and describe shapes
- K.GM.B Analyze, compare, create, and compose shapes.
- K.GM.C Describe and compare measurable attributes

K.DR - Data Reasoning

- K.DR.A Pose investigative questions and collect/consider data
- K.DR.B Analyze, represent, and interpret data.

Grade K Math Standards (2021)

ALGEBRAIC REASONING: OPERATIONS (K.OA)

K.OA.A Understand addition and subtraction.

K.OA.A.1 Represent addition as putting together and adding to and subtraction as taking apart and taking from using objects, drawings, physical expressions, numbers or equations.

K.OA.A.2 Add and subtract within 10. Model authentic contexts and solve problems that use addition and subtraction within 10.

K.OA.A.3 Using objects or drawings, and equations, decompose numbers less than or equal to 10 into pairs in more than one way.

K.OA.A.4 By using objects, drawings, or equations, find the unknown number that makes 10 when added to a given number from 1 - 9.

K.OA.A.5 Fluently add and subtract within 5 with accurate, efficient, and flexible strategies.

NUMERIC REASONING: COUNTING AND CARDINALITY (K.NCC)

K.NCC.A Know number names and the count sequence.

K.NCC.A.1 Orally count to 100 by ones and by tens in sequential order.

K.NCC.A.2 Count forward beginning from a given number within 100 of a known sequence.

K.NCC.A.3 Identify number names, write numbers, and the count sequence from 0-20. Represent a number of objects with a written number 0-20.

K.NCC.B Count to tell the number of objects.

K.NCC.B.4 Understand the relationship between numbers and quantities; connect counting to cardinality.

K.NCC.B.5 Count to answer “how many?” questions using up to 20 objects arranged in a variety of configurations or as 10 objects in a scattered configuration. Given a number from 1-20, count out that many objects.

K.NCC.C Compare numbers.

K.NCC.C.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group.

K.NCC.C.7 Compare two numbers between 1 and 10 presented as written numerals.

NUMERIC REASONING: BASE TEN ARITHMETIC (K.NBT)

K.NBT.A Work with numbers 11-19 to gain foundations for place value.

K.NBT.A.1 Compose and decompose from 11 to 19 into groups of ten ones and some further ones using objects, drawings, or equations.

GEOMETRIC REASONING AND MEASUREMENT (K.GM)

K.GM.A Identify and describe shapes.

K.GM.A.1 Describe objects in the environment using names of shapes and describe the relative positions of these objects in their environment.

K.GM.A.2 Correctly name common two-dimensional and three-dimensional geometric shapes regardless of their orientations or overall size.

K.GM.A.3 Identify shapes as two-dimensional or three-dimensional.

K.GM.B Analyze, compare, create, and compose shapes.

K.GM.B.4 Analyze and compare two and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts and attributes.

K.GM.B.5 Represent shapes in the world by building shapes from components and drawing shapes.

K.GM.B.6 Compose common shapes to form larger shapes.

K.GM.C Describe and compare measurable attributes.

K.GM.C.7 Describe several measurable attributes of a single object using measurable terms, such as length or weight.

K.GM.C.8 Directly compare two objects with a measurable attribute in common, and describe which object has “more” or “less” of the attribute.

DATA REASONING (K.DR)

K.DR.A Pose investigative questions and collect/consider data.

K.DR.A.1 Generate questions to investigate situations within the classroom. Collect or consider data that can naturally answer questions by sorting and counting.

K.DR.B Analyze, represent, and interpret data.

K.DR.B.2 Analyze data sets by counting the number of objects in each category and interpret results by classifying and sorting objects by count.