2021 OREGON MATH STANDARDS
Version 5.2.8

# OREGON GRADE 2 MATHEMATICS

## GRADE LEVEL GUIDANCE

OREGON
DEPARTMENT OF
EDUCATION

OREGON
MATH PROJECT
*Meaningful Math for Every Student*

# Oregon Math Standards
GRADE 2

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## Contents


Contents ..... 2
- Oregon Math Project ..... 2
- Clarifying Documents ..... 2

Grade 2 Overview ..... 3
- Critical Areas of Focus ..... 3
- Domains and Clusters ..... 3

Grade 2 Math Standards (2021) ..... 4
- Algebraic Reasoning: Operations (2.OA) ..... 4
- Numeric Reasoning: Base Ten Arithmetic (2.NBT) ..... 4
- Geometric Reasoning and Measurement (2.GM) ..... 5
- Data Reasoning (2.DR) ..... 5


### 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



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# Grade 2 Overview

## Critical Areas of Focus

In Grade 2, instructional time should focus on four critical areas:

1. (1) extending understanding of base-ten notation;
2. (2) building fluency with addition and subtraction;
3. (3) using standard units of measure; and
4. (4) describing and analyzing shapes.

Link to summary of Grade 2 Critical Areas

*Students should spend the large majority[1] 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.*

*[1]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

*2.OA - Algebraic Reasoning: Operations*

- ■ 2.OA.A Represent and solve problems involving addition and subtraction.
- ■ 2.OA.B Add and subtract within 20.
- □ 2.OA.C Work with equal groups of objects to gain foundations for multiplication.

*2.NBT - Numeric Reasoning: Base Ten Arithmetic*

- ■ 2.NBT.A Understand place value
- ■ 2.NBT.B Use place value understanding and properties of operations to add and subtract.

*2.GM - Geometric Reasoning and Measurement*

- ○ 2.GM.A Reason with shapes and their attributes.
- ■ 2.GM.B Measure and estimate lengths in standard units.
- ■ 2.GM.C Relate addition and subtraction to length.
- □ 2.GM.D Work with time and money.

*2.DR - Data Reasoning*

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



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# Grade 2 Math Standards (2021)

## Algebraic Reasoning: Operations (2.OA)

*2.OA.A* *Represent and solve problems involving addition and subtraction.*

2.OA.A.1 Use addition and subtraction within 100 to solve one- and two-step problems in authentic contexts by using drawings and equations with a symbol for the unknown.

*2.OA.B* *Add and subtract within 20.*

2.OA.B.2 Fluently add and subtract within 20 using accurate, efficient, and flexible strategies and algorithms based on place value and properties of operations.

*2.OA.C* *Work with equal groups of objects to gain foundations for multiplication.*

2.OA.C.3 Determine whether a group up to 20 objects has an odd or even number by pairing objects or counting them by 2s; record using drawings and equations including expressing an even number as a sum of two equal addends.

2.OA.C.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

## Numeric Reasoning: Base Ten Arithmetic (2.NBT)

*2.NBT.A* *Understand place value.*

2.NBT.A.1 Understand 100 as a bundle of ten tens and that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.

2.NBT.A.2 Count within 1000; skip-count by 5's, 10's, and 100's.

2.NBT.A.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

2.NBT.A.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.

*2.NBT.B* *Use place value understanding and properties of operations to add and subtract.*

2.NBT.B.5 Fluently add & subtract within 100 using accurate, efficient, & flexible strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

2.NBT.B.6 Add up to four two-digit numbers using strategies based on place value and properties of operations and describe how two different strategies result in the same sum.

2.NBT.B.7 Add and subtract within 1000 using concrete or visual representations and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Relate the strategy to a written method and explain why sometimes it is necessary to compose or decompose tens or hundreds.

2.NBT.B.8 Without having to count, mentally find 10 more or 10 less and 100 more or 100 less than a given three-digit number.

2.NBT.B.9 Explain why strategies to add and subtract work using properties of operations and the relationship between addition and subtraction.



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## GEOMETRIC REASONING AND MEASUREMENT (2.GM)

*2.GM.A* *Reason with shapes and their attributes.*

2.GM.A.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.

2.GM.A.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.

2.GM.A.3 Partition circles and rectangles into two, three, or four equal parts. Recognize that equal parts of identical wholes need not have the same shape.

*2.GM.B* *Measure and estimate lengths in standard units.*

2.GM.B.4 Measure the length of an object by selecting and using appropriate measurement tools.

2.GM.B.5 Measure the length of an object using two different length units and describe how the measurements relate to the size of the unit chosen.

2.GM.B.6 Estimate lengths using units of inches, feet, yards, centimeters, and meters.

2.GM.B.7 Measure two objects and determine the difference in their lengths in terms of a standard length unit.

*2.GM.C* *Relate addition and subtraction to length.*

2.GM.C.8 Use addition and subtraction within 100 to solve problems in authentic contexts involving lengths that are given in the same units.

2.GM.C.9 Represent whole number lengths on a number line diagram; use number lines to find sums and differences within 100.

*2.GM.D* *Work with time and money.*

2.GM.D.10 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

2.GM.D.11 Solve problems in authentic contexts involving dollar bills, quarters, dimes, nickels, and pennies, using $ (dollars) and c (cents) symbols appropriately.

## DATA REASONING (2.DR)

*2.DR.A* *Pose investigative questions and collect/consider data.*

2.DR.A.1 Generate questions to investigate situations within the classroom. Collect or consider data that can naturally answer questions by using measurements with whole-number units.

*2.DR.B* *Analyze, represent, and interpret data.*

2.DR.B.2 Analyze data with a single-unit scale and interpret information presented to answer investigative questions.



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