



Grade 2: **Mathematics**

Quarter 1: Curriculum & Pacing Guide

Quarter Overview

Students strengthen their understanding of the base-ten number system through data, measurement, and place value experiences. Students create and interpret picture and bar graphs, estimate and measure lengths using centimeters and meters, and apply addition and subtraction strategies to solve one- and two-step problems within 100.

They then extend their place value understanding to 1,000 by composing and decomposing ones, tens, and hundreds; counting by place value units; and representing and comparing three-digit numbers in standard, expanded, unit, and word forms. These foundational concepts prepare students for more complex addition and subtraction work throughout the year.

Essential Questions

- How can data be organized and represented so that it is easy to understand?
- How can graphs help us answer questions and solve problems?
- How can we estimate, measure, and compare the lengths of objects?
- How are centimeters, tens, and hundreds connected through the base ten system?
- How can numbers be composed, decomposed, and represented in different ways?
- How does the position of a digit determine its value?
- How can drawings, models, and number lines help us solve addition and subtraction problems?
- How can place value help us count and compare numbers within 1,000?
- How can we explain and justify our mathematical thinking?

Standards for Mathematical Practice (Used Throughout)

- MP1 — Make sense of problems and persevere in solving them
- MP2 — Reason abstractly and quantitatively
- MP3 — Construct viable arguments and critique the reasoning of others
- MP4 — Model with mathematics
- MP5 — Use appropriate tools strategically
- MP6 — Attend to precision
- MP7 — Look for and make use of structure
- MP8 — Look for and express regularity in repeated reasoning

Second Grade Quarter 1: *I can statements* (1-9 Weeks)

- I can organize and represent data using picture graphs and bar graphs.
- I can use a graph to answer questions and solve problems.
- I can estimate, measure, and compare the length of objects using centimeters and meters.
- I can use a ruler like a number line to solve addition and subtraction problems.
- I can understand place value units of ones, tens, and hundreds.
- I can write three-digit numbers in standard, expanded, unit, and word forms.
- I can model numbers within 1,000 using money and place value disks.
- I can compose and decompose numbers into hundreds, tens, and ones.
- I can compare two three-digit numbers using place value.
- I can explain and justify my mathematical thinking.

Module 1, Part 1 Reference — Place Value Through Metric Measurement and Data (Weeks 2–6)

Standards Addressed — Part 1

- CC.2.4.2.A.1 — Data & Measurement: measure and estimate lengths in standard units (centimeters and meters)
- CC.2.4.2.A.4 — Data & Measurement: represent and interpret data using picture graphs and bar graphs
- CC.2.4.2.A.6 — Data & Measurement: use addition and subtraction within 100 to solve length/measure problems, including using a ruler as a number line

Vocabulary

Content: bar graph, benchmark, benchmark number, category, data, difference, estimate, key, meter, number line, scale, table, tick mark

Familiar: centimeter, compare, endpoint, equation, expression, fewer than, fewest, graph, height, how many fewer, how many more, length, length unit, measure, more than, most, picture graph, related, represent, shorter, symbol, taller, total, unknown

Academic: support

Materials Needed

Calendar time tools (bundles of 10s/100s, skip counting, telling time, odd/even numbers, money & coin talk) · 100-bead rekenrek · 8" × 2" strips of paper · Centimeter cubes · Chart paper · Color tiles · Dry erase markers · Glue sticks · Markers · Pencils · Whiteboards & erasers · Resealable plastic bags · Sticky notes · Tape · Unifix cubes · Wood rulers (inch and metric)

Curriculum Resources

Eureka Math² Module 1 Manual · greatminds.org website · [Happy Numbers](#) · Student Learn Book — Module 1 / Teach Book · Eureka Math² 10 cm cards (set of 300) · Eureka Math²

double-sided meter stick (set of 12) · Eureka Math² measuring tape · Eureka Math² Numeral cards (set of 12)

Module 1, Part 2 Reference — Place Value, Counting, and Comparing Within 1,000 (Weeks 6–9)

Standards Addressed — Part 2

- CC.2.1.2.B.1 — Number & Operations: count within 1,000; skip-count by 5s, 10s, and 100s
- CC.2.1.2.B.2 — Number & Operations: understand place value (hundreds, tens, ones) and read/write numbers to 1,000 in standard, expanded, unit, and word forms
- CC.2.2.2.A.1 — Algebraic Concepts: use place value understanding and properties of operations to add and subtract

Vocabulary, Materials & Resources

Part 2 continues to build on Part 1's vocabulary and uses the same core materials and curriculum resources listed above (base-ten blocks, place value disks, and money manipulatives are added for this section).

9-Week Pacing at a Glance

Wk	Module	Focus	Lessons This Week	Guiding Question(s)
1	Getting Started	Establish Routines & Classroom Expectations	No new content lessons this week	Set up math routines, tools, and norms for the year
2	Module 1, Pt 1	Place Value Through Metric Measurement and Data	Lessons 1–4: Represent Data to Solve Problems Lesson 5: Metric Measurement and Concepts About a Ruler	How can data be organized and represented so that it is easy to understand? How can graphs help us answer questions and solve problems?
3	Module 1, Pt 1	Place Value Through Metric Measurement and Data	Lessons 6–10: Metric Measurement and Concepts About a Ruler	How can we estimate, measure, and compare the lengths of objects?
4	Module 1, Pt 1	Place Value Through Metric Measurement and Data	Lessons 11–14: Estimate, Measure, and Compare Lengths	How can we estimate, measure, and compare the lengths of objects?
5	Module 1, Pt 1	Place Value Through Metric Measurement and Data	Lessons 15–19: Solve Compare Problems by Using the Ruler as a Number Line	How can drawings, models, and number lines help us solve addition and subtraction problems?
6	Module 1, Pt 1 → 2	Module 1 Part 1 Assessment; Begin Place Value, Counting & Comparing Within 1,000	Module 1 Part 1: Assessment Lessons 20–22: Understand Place Value Units	How are centimeters, tens, and hundreds connected through the base ten system?
7	Module 1, Pt 2	Place Value, Counting, and Comparing Within 1,000	Lesson 23: Understand Place Value Units Lessons 24–27: Express Three-Digit Numbers in Different Forms	How can numbers be composed, decomposed, and represented in different ways?
8	Module 1, Pt 2	Place Value, Counting, and Comparing Within 1,000	Lessons 28–30: Model Base-Ten Numbers Within 1,000 with Money Lessons 31–32: Compose and Decompose with Place Value Disks	How does the position of a digit determine its value?

Wk	Module	Focus	Lessons This Week	Guiding Question(s)
9	Module 1, Pt 2	Place Value, Counting, and Comparing Within 1,000	Lessons 33–34: Compose and Decompose with Place Value Disks Lessons 35–36: Compare Two Three-Digit Numbers in Different Forms	<i>How can place value help us count and compare numbers within 1,000?</i>

Differentiation Strategies by Topic

Quick supports and extensions teachers can pull from during each instructional block. Use alongside small-group time, centers, or independent work.

Topic	Support (Below Level)	Extension (Above Level)
Represent Data to Solve Problems (Week 2)	Use real objects or picture cards to sort into categories before graphing; keep categories to 2–3; provide a pre-drawn graph template to fill in.	Create a graph from data students collect themselves; write and answer comparison questions using the graph ("how many more/fewer").
Metric Measurement & Concepts About a Ruler (Weeks 2–3)	Use centimeter cubes lined end-to-end before introducing a ruler; model aligning the zero mark and reading tick marks one at a time.	Measure using a meter stick for longer objects; convert between related lengths and explain the relationship between centimeters and meters.
Estimate, Measure, and Compare Lengths (Week 4)	Provide a benchmark object (e.g., a 10 cm strip) to compare against before estimating; measure with a partner to check estimates together.	Estimate and then measure several objects, ranking them by length; explain how a benchmark improves the accuracy of an estimate.
Solve Compare Problems Using the Ruler as a Number Line (Week 5)	Use a physical ruler alongside a drawn number line, pointing to each unit while counting; keep differences within 10.	Solve two-step compare problems using the ruler/number line; write the matching equation and explain the strategy.
Understand Place Value Units (Weeks 6–7)	Use base-10 blocks (ones, tens, hundreds) to physically build a number before writing it; bundle 10 ones into a ten with the student.	Represent the same three-digit number using different combinations of hundreds/tens/ones (e.g., 3 hundreds 2 tens = 2 hundreds 12 tens) and explain why both work.
Express Three-Digit Numbers in Different Forms (Week 7)	Match a base-10 block model to its standard form number with a template showing hundreds/tens/ones columns.	Convert fluently between standard, expanded, unit, and word forms without a template; explain the value of each digit in a number.
Model Numbers with Money & Place Value Disks (Weeks 8–9)	Use dollar bills and dimes/pennies (or place value disks) side by side with base-10 blocks to connect the two models; keep numbers under 200.	Model the same three-digit number using both money and place value disks; explain how each model represents composing and decomposing.
Compare Two Three-Digit Numbers (Week 9)	Line up place value disks or blocks for two numbers, comparing hundreds first, then tens, then ones, with teacher modeling each step.	Compare numbers given in different forms (e.g., expanded form vs. word form) without converting both to standard form first; order a set of numbers.

General Differentiation Toolkit

Support Strategies (Below Level / Emerging)

- Use concrete manipulatives (base-10 blocks, place value disks, centimeter cubes, rulers) before moving to pictorial or abstract representations.
- Pre-teach vocabulary — especially measurement and place-value terms like "benchmark," "estimate," and "expanded form" — using visuals before the whole-group lesson.
- Keep numbers or lengths within a smaller, familiar range while a skill is new, then extend toward the full range (100 or 1,000) once secure.
- Provide a completed worked example alongside a matching blank template for guided practice.
- Pair with a peer partner for turn-and-talk and modeling during hands-on measurement or place-value tasks.
- Break multi-step problems into smaller, sequenced steps with checkpoints.

Extension Strategies (Above Level)

- Extend measurement or place-value tasks beyond the grade-level range (e.g., numbers closer to 1,000, longer lengths in meters).
- Challenge students to represent the same number or length in multiple ways and explain why each representation is valid.
- Ask students to justify in writing why one strategy or representation is more efficient or precise than another.
- Have students create original data sets, graphs, or word problems for a partner to solve.
- Have students teach a strategy to a small group or lead a turn-and-talk explaining their reasoning.

Multilingual Learner / Language Support

- Pair new vocabulary (e.g., "benchmark," "estimate," "compose," "expanded form") with gestures, visuals, and native-language cognates where possible.
- Use sentence frames for explaining reasoning: "I estimated ___ because ___." or "The digit in the hundreds place is ___ because ___."
- Allow students to show understanding through drawings, manipulatives, or hands-on measurement before requiring a verbal or written explanation.
- Preview key vocabulary in a small group before it's introduced in the whole-class lesson.



Grade 2: **Mathematics**

Quarter 2: Curriculum & Pacing Guide

Quarter Overview

Students develop flexible and efficient strategies for adding and subtracting within 200. They use place value understanding, concrete models, drawings, and written methods to compose and decompose tens and hundreds.

Students explore strategies such as breaking numbers apart, making a ten or hundred, compensation, counting on, and counting back. Throughout the module, they apply these strategies to one- and two-step word problems and explain why their chosen methods are effective.

Essential Questions

- How does place value help us add and subtract within 200?
- How can breaking numbers into smaller parts make addition and subtraction easier?
- When is it helpful to compose a new ten or hundred?
- How can models, drawings, and written methods represent our mathematical thinking?
- How can addition and subtraction help us solve one- and two-step problems?
- When is it necessary to decompose a ten or hundred?
- How can benchmark numbers, such as multiples of 10 and 100, help us calculate efficiently?
- How are addition and subtraction related?
- How can we determine which addition or subtraction strategy is most efficient?
- How can we explain and verify that a solution is reasonable?

Standards for Mathematical Practice (Used Throughout)

- MP1 — Make sense of problems and persevere in solving them
- MP2 — Reason abstractly and quantitatively
- MP3 — Construct viable arguments and critique the reasoning of others
- MP4 — Model with mathematics
- MP5 — Use appropriate tools strategically
- MP6 — Attend to precision
- MP7 — Look for and make use of structure
- MP8 — Look for and express regularity in repeated reasoning

Second Grade Quarter 2: *I can statements* (10-18 Weeks)

- I can use place value to add and subtract numbers within 200.
 - I can break numbers into smaller parts to make addition and subtraction easier.
 - I can compose a new ten or hundred when I add.
 - I can decompose a ten or hundred when I subtract.
 - I can use models, drawings, and written methods to show my mathematical thinking.
 - I can solve one- and two-step addition and subtraction problems.
 - I can use benchmark numbers, like multiples of 10 and 100, to calculate efficiently.
 - I can identify shapes by their attributes, like angles, faces, and sides.
 - I can combine shapes to make a composite shape.
 - I can explain and check that my answer makes sense.
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Module 1, Part 2 Reference — Place Value, continued (Week 10)

Standards Addressed

- CC.2.1.2.B.1 — Number & Operations: count within 1,000; skip-count by 5s, 10s, and 100s
- CC.2.1.2.B.2 — Number & Operations: understand place value and read/write numbers to 1,000 in multiple forms

Vocabulary, Materials & Resources

See the Q1 Pacing Guide — this is the tail end of Module 1 Part 2 and uses the same vocabulary, materials, and curriculum resources.

Module 2 Reference — Addition and Subtraction Within 200 (Weeks 11–16)

Standards Addressed

- CC.2.1.2.B.3 — Number & Operations: use place value understanding and properties of operations to add and subtract
- CC.2.2.2.A.1 — Algebraic Concepts: use place value understanding and properties of operations to add and subtract within 200

Vocabulary

Content: decompose, sum

Familiar: addend, bar graph, benchmark number, bundle, centimeters, compare, compose, difference, efficiency, equal to, equation, expanded form, expression, graph, greater than, hundreds, less than, number bond, number sentence, ones, open number line, part, place

value units, rename, scale, standard form, subtracting, symbol, take away, take from, tens, total, unbundle, unit form, word form

Academic: defend, exchange, support

Materials Needed

Calendar time tools (bundles of 10s/100s, skip counting, telling time, odd/even numbers, money & coin talk) · Pencils · Chart paper · Classroom money kit · Craft sticks · Dry erase markers · Markers · Measuring tapes · Whiteboards & erasers · Place value disk sets · Sticky notes

Curriculum Resources

Eureka Math² Module 2 Manual · [greatminds.org](https://www.greatminds.org) website · [Happy Numbers](#) · Student Learn Book — Module 2 / Teach Book

Module 3 Reference — Shapes and Time with Fraction Concepts (Weeks 17–18, continues into Q3)

Standards Addressed

- CC.2.3.2.A.1 — Geometry: recognize and draw shapes with specified attributes (angles, faces, sides)
- CC.2.3.2.A.2 — Geometry: partition shapes into equal shares and describe composite shapes

Vocabulary

Content: angle, attribute, cube, edge, face, fraction, geometry, horizontal, parallelogram, pentagon, polygon, quadrilateral, quarter past, quarter to, right angle, side, thirds, third of, three-dimensional shape, two-dimensional shape, vertex, vertical

Familiar and academic vocabulary for Module 3 continues to be introduced as the module carries into Quarter 3; see the Q3 guide for the complete list.

Materials Needed

Calendar time tools (bundles of 10s/100s, skip counting, telling time, odd/even numbers, money & coin talk) · Bag of mini marshmallows · Bag of spaghetti · Blank sheets of paper · Brad fasteners · Chart paper

Curriculum Resources

Eureka Math² Module 3 Manual · [greatminds.org](https://www.greatminds.org) website · [Happy Numbers](#) · Student Learn Book — Module 3 / Teach Book

9-Week Pacing at a Glance

Wk	Module	Focus	Lessons This Week	Guiding Question(s)
10	Module 1, Pt 2	Place Value, Counting, and Comparing Within 1,000, continued	Lessons 37–38: Compare Two Three-Digit Numbers in Different Forms Module 1 Part 2 Assessment	<i>How can place value help us count and compare numbers within 1,000?</i>
11	Module 2	Addition and Subtraction Within 200	Lessons 1–5: Simplifying Strategies for Addition	<i>How can breaking numbers into smaller parts make addition and subtraction easier?</i>
12	Module 2	Addition and Subtraction Within 200	Lessons 6–7: Simplifying Strategies for Addition Lessons 8–10: Strategies for Composing a Ten and a Hundred to Add	<i>When is it helpful to compose a new ten or hundred?</i>
13	Module 2	Addition and Subtraction Within 200	Lessons 11–12: Strategies for Composing a Ten and a Hundred to Add Lessons 13–15: Simplifying Strategies for Subtraction	<i>How does place value help us add and subtract within 200?</i>
14	Module 2	Addition and Subtraction Within 200	Lessons 16–19: Simplifying Strategies for Subtraction Lesson 20: Strategies for Decomposing a Ten and a Hundred to Subtract	<i>When is it necessary to decompose a ten or hundred?</i>
15	Module 2	Addition and Subtraction Within 200	Lessons 21–25: Strategies for Decomposing a Ten and a Hundred to Subtract	<i>How can benchmark numbers, such as multiples of 10 and 100, help us calculate efficiently?</i>
16	Module 2	Strategies for Decomposing a Ten and a Hundred to Subtract; Module 2 Assessment	Lessons 26–27: Strategies for Decomposing a Ten and a Hundred to Subtract Module 2 Assessment	<i>How can we determine which addition or subtraction strategy is most efficient?</i>
17	Module 3	Shapes and Time with Fraction Concepts	Lessons 1–5: Attributes of Geometric Shapes	<i>How can models, drawings, and written methods represent our mathematical thinking?</i>

Wk	Module	Focus	Lessons This Week	Guiding Question(s)
18	Module 3	Shapes and Time with Fraction Concepts	Lessons 6–9: Composite Shapes and Fraction Concepts	<i>How are addition and subtraction related?</i>

Differentiation Strategies by Topic

Quick supports and extensions teachers can pull from during each instructional block. Use alongside small-group time, centers, or independent work.

Topic	Support (Below Level)	Extension (Above Level)
Simplifying Strategies for Addition (Weeks 11–12)	Use base-10 blocks or an open number line with pre-marked jumps of 10; break one addend into a friendly ten and ones with teacher modeling.	Add mentally using compensation (e.g., adjust one addend to a friendly number, then correct); explain the strategy in writing.
Composing a Ten/Hundred to Add (Weeks 12–13)	Use place value disks to physically trade 10 ones for a ten (or 10 tens for a hundred) before recording the equation.	Compose a ten or hundred mentally without disks; solve problems requiring two regroupings in one problem.
Simplifying Strategies for Subtraction (Weeks 13–14)	Use an open number line with pre-marked jumps to count back or count up to find the difference; keep within friendly ten boundaries.	Choose between counting back, counting up, or compensation based on the numbers given, and justify the choice.
Decomposing a Ten/Hundred to Subtract (Weeks 14–16)	Use place value disks to physically "unbundle" a ten into 10 ones (or a hundred into 10 tens) before recording the subtraction.	Decompose mentally without disks; solve subtraction problems requiring two regroupings and explain each step.
Attributes of Geometric Shapes (Week 17)	Sort real shape models by one attribute at a time (number of sides, number of angles); use a simple attribute checklist with pictures.	Sort shapes by multiple attributes at once; compare 2D and 3D shapes and explain how faces relate to 2D shapes.
Composite Shapes & Fraction Concepts (Week 18)	Use physical shape pieces (marshmallows/spaghetti for edges and vertices, or pattern blocks) to build composite shapes hands-on before drawing.	Partition a shape into thirds and compare to halves/fourths; explain how the number of equal parts affects the size of each share.

General Differentiation Toolkit

Support Strategies (Below Level / Emerging)

- Use concrete manipulatives (place value disks, base-10 blocks, open number lines) before moving to pictorial or abstract representations.
- Pre-teach vocabulary — especially terms like "decompose," "compose," and "rename" — using visuals and hands-on modeling before the whole-group lesson.
- Keep numbers within a smaller, familiar range (e.g., within 100) while a strategy is new, then extend to 200 once secure.
- Provide a completed worked example alongside a matching blank template for guided practice.
- Pair with a peer partner for turn-and-talk and modeling during hands-on place-value or shape tasks.
- Break two-step word problems into smaller, sequenced steps with checkpoints.

Extension Strategies (Above Level)

- Extend addition/subtraction tasks beyond 200, or introduce problems requiring two regroupings.
- Ask students to justify in writing why one strategy (compensation, making a ten, counting on) is more efficient than another for a given problem.
- Challenge students to solve the same problem two different ways and compare the equations or number lines.
- Have students create original word problems for a partner that require a specific strategy.
- Have students teach a strategy to a small group or lead a turn-and-talk explaining their reasoning.

Multilingual Learner / Language Support

- Pair new vocabulary (e.g., "decompose," "efficiency," "attribute") with gestures, visuals, and native-language cognates where possible.
- Use sentence frames for explaining reasoning: "I used ___ because ___." or "This shape has ___ sides, so it is a ___."
- Allow students to show understanding through drawings or manipulatives before requiring a verbal or written explanation.
- Preview key vocabulary in a small group before it's introduced in the whole-class lesson.



Grade 2: **Mathematics**

Quarter 3: Curriculum & Pacing Guide

Quarter Overview

Students explore the attributes of two- and three-dimensional shapes and use those attributes to identify, classify, compose, and decompose shapes. They partition shapes into equal shares and describe them as halves, thirds, and fourths, applying their understanding of fractional parts to tell time to the nearest five minutes.

Students then extend their place-value understanding to add and subtract within 1,000. They use mental strategies, concrete models, place-value drawings, and written methods to compose and decompose tens and hundreds, select efficient strategies, and solve one- and two-step problems.

Essential Questions

- How can attributes help us identify, describe, and classify shapes?
- How can smaller shapes be combined to create a new shape?
- How can a whole shape be decomposed into smaller shapes?
- What makes the parts of a whole equal shares?
- How can a whole be partitioned into halves, thirds, and fourths?
- How are fractional parts connected in telling time?
- How can we tell and represent time to the nearest five minutes?
- How does place value help us add and subtract within 1,000?
- When and why do we compose and decompose tens and hundreds?
- How can mental math, models, drawings, and written methods represent our thinking?
- How can we select the most efficient strategy for a given problem?
- How are addition and subtraction related?
- How can we use addition and subtraction to solve one- and two-step problems?
- How can we explain and verify that a solution is reasonable?

Standards for Mathematical Practice (Used Throughout)

- MP1 — Make sense of problems and persevere in solving them
- MP2 — Reason abstractly and quantitatively
- MP3 — Construct viable arguments and critique the reasoning of others
- MP4 — Model with mathematics
- MP5 — Use appropriate tools strategically
- MP6 — Attend to precision
- MP7 — Look for and make use of structure
- MP8 — Look for and express regularity in repeated reasoning

Second Grade Quarter 3: *I can statements* (19-27 Weeks)

- I can partition circles and rectangles into halves, thirds, and fourths.
 - I can explain what makes the parts of a whole equal shares.
 - I can tell and write time to the nearest five minutes.
 - I can connect fractional parts to telling time on a clock.
 - I can use mental math strategies to add and subtract within 1,000.
 - I can compose a ten or hundred when I add.
 - I can decompose a ten or hundred when I subtract.
 - I can choose the most efficient strategy to solve an addition or subtraction problem.
 - I can solve one- and two-step addition and subtraction problems.
 - I can solve problems using coins and bills.
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Module 3 Reference — Shapes and Time with Fraction Concepts (Weeks 19–21)

Standards Addressed

- CC.2.3.2.A.2 — Geometry: partition circles and rectangles into halves, thirds, and fourths and describe the shares
- CC.2.4.2.A.2 — Data & Measurement: tell and write time to the nearest five minutes, connecting to fractional parts of a clock face

Vocabulary

Content vocabulary was introduced in Quarter 2 (see the Q2 guide) — this quarter adds:

Familiar: circle, fourths, fourth of, half, half of, halves, hexagon, parallel, partition, quarter, quarter of, rectangle, rhombus, square, square corner, trapezoid, triangle

Academic: create, defend, exchange, support

Materials Needed

Calendar time tools (bundles of 10s/100s, skip counting, telling time, odd/even numbers, money & coin talk) · Construction paper, grid paper, sticky notes · Crayons · Cube · Demonstration clock · Dry erase markers, whiteboards · Envelopes · Stop watch · Scissors, glue sticks, rulers · Markers, pencils · Plastic pattern blocks, unifix cubes · Toothpicks

Curriculum Resources

Eureka Math² Module 3 Manual · greatminds.com website · Happy Numbers · Student Learn Book — Module 3 / Teach Book

Module 4 Reference — Addition and Subtraction Within 1,000 (Weeks 22–26)

Standards Addressed

- CC.2.2.2.A.1 — Algebraic Concepts: use place value understanding and properties of operations to add and subtract within 1,000
- CC.2.2.2.A.2 — Algebraic Concepts: select and apply an efficient strategy to solve one- and two-step addition and subtraction problems
- CC.2.1.2.B.1 — Number & Operations: count within 1,000; skip-count by 5s, 10s, and 100s
- CC.2.1.2.B.2 — Number & Operations: understand place value (hundreds, tens, ones)
- CC.2.1.2.B.3 — Number & Operations: use place value understanding and properties of operations to add and subtract

Vocabulary

Familiar: addend, benchmark number, column, compose, confirm, decomposition, difference, efficiency, end point, equation, expression, fewer, horizontal, length, less, more, number bond, number line, number sentence, part-total, record, rename, strategy, subtraction, tape diagram, unit, unknown, unlabeled, vertical

Academic: Module 4 does not introduce any new academic vocabulary.

Materials Needed

Calendar time tools (bundles of 10s/100s, skip counting, telling time, odd/even numbers, money & coin talk) · Chart paper · Dot dice (set of 12) · Dry erase markers, whiteboards · Index cards · Markers, pencils · Whiteboard erasers · Sticky notes · Unifix cubes

Curriculum Resources

Eureka Math² Module 4 Manual · [greatminds.org website](https://www.greatminds.org) · [Happy Numbers](#) · Student Learn Book — Module 4 / Teach Book · Eureka Math² measuring tape · Eureka Math² place value disks set (ones to thousands)

Module 5 Preview — Money, Data, and Customary Measurement (Begins Week 27, continues into Q4)

Standards Addressed (so far)

- CC.2.2.2.A.3 — Algebraic Concepts: use addition and subtraction within 100 to solve word problems involving money
- CC.2.4.2.A.1 through CC.2.4.2.A.6 — Data & Measurement: measure, estimate, represent data (line plots), and solve problems involving money and customary units (foot, inch, yard)

Vocabulary

Content (introduced so far): foot, inch, interval, line plot, yard

Materials & Resources

The source pacing guide references its full materials and resources list on the Quarter 4 document, since Module 5 continues there — see the Q4 guide for the complete list.

9-Week Pacing at a Glance

Wk	Module	Focus	Lessons This Week	Guiding Question(s)
19	Module 3	Shapes and Time with Fraction Concepts	Lessons 10–13: Halves, Thirds, and Fourths of Circles and Rectangles	<i>How can a whole be partitioned into halves, thirds, and fourths? What makes the parts of a whole equal shares?</i>
20	Module 3	Shapes and Time with Fraction Concepts	Lessons 14–18: Application of Fractions to Tell Time	<i>How are fractional parts connected in telling time? How can we tell and represent time to the nearest five minutes?</i>
21	Module 3	Application of Fractions to Tell Time; Module 3 Assessment	Lesson 19: Application of Fractions to Tell Time Module 3 Assessment	<i>How can we tell and represent time to the nearest five minutes?</i>
22	Module 4	Addition and Subtraction Within 1,000	Lessons 1–4: Mental Place Value Strategies Lesson 5: Strategies for Composing Tens and Hundreds Within 1,000	<i>How does place value help us add and subtract within 1,000? How can mental math, models, drawings, and written methods represent our thinking?</i>
23	Module 4	Addition and Subtraction Within 1,000	Lessons 6–10: Strategies for Composing Tens and Hundreds Within 1,000	<i>When and why do we compose and decompose tens and hundreds?</i>
24	Module 4	Addition and Subtraction Within 1,000	Lesson 11: Strategies for Composing Tens and Hundreds Within 1,000 Lessons 12–15: Simplifying Strategies for Subtracting Within 1,000	<i>How can we select the most efficient strategy for a given problem?</i>
25	Module 4	Addition and Subtraction Within 1,000	Lessons 16–20: Strategies for Decomposing Tens and Hundreds Within 1,000	<i>When and why do we compose and decompose tens and hundreds? How are addition and subtraction related?</i>

Wk	Module	Focus	Lessons This Week	Guiding Question(s)
26	Module 4	Apply Efficient Addition and Subtraction Strategies; Module 4 Assessment	Lessons 21–24: Apply Efficient Addition and Subtraction Strategies Module 4 Assessment	<i>How can we use addition and subtraction to solve one- and two-step problems? How can we explain and verify that a solution is reasonable?</i>
27	Module 5	Money, Data, and Customary Measurement	Lessons 1–2: Problem Solving with Coins and Bills	<i>Module 5 begins here and continues into Quarter 4 — see the Q4 guide for its full essential questions.</i>

Differentiation Strategies by Topic

Quick supports and extensions teachers can pull from during each instructional block. Use alongside small-group time, centers, or independent work.

Topic	Support (Below Level)	Extension (Above Level)
Halves, Thirds, and Fourths of Circles/Rectangles (Week 19)	Fold or cut a physical circle/rectangle into equal parts hands-on before drawing; use the sentence frame: "This whole is divided into ___ equal parts."	Compare thirds, halves, and fourths of the same whole and explain which part is largest/smallest and why; partition irregular wholes.
Application of Fractions to Tell Time (Weeks 20–21)	Use a demonstration clock with the face divided into colored fourths; connect "quarter past" and "half past" directly to the fraction pieces already learned.	Tell and write time to the nearest five minutes independently; explain how the minute hand's position relates to fractional parts of the hour.
Mental Place Value Strategies (Week 22)	Use place value disks or a hundreds chart to model mental strategies step by step before removing the visual support.	Solve addition/subtraction problems mentally without tools; explain the mental strategy used in writing.
Composing Tens and Hundreds Within 1,000 (Weeks 22–24)	Use place value disks to physically trade 10 ones for a ten or 10 tens for a hundred before recording the equation.	Compose a ten and a hundred in the same problem mentally; solve problems requiring multiple regroupings.
Simplifying Strategies for Subtracting Within 1,000 (Week 24)	Use an open number line or place value disks to count up or back in friendly jumps; keep the numbers being subtracted close together at first.	Choose between subtraction strategies (counting up, compensation, standard algorithm) based on the numbers given, and justify the choice.
Decomposing Tens and Hundreds Within 1,000 (Week 25)	Use place value disks to physically "unbundle" a hundred into 10 tens (or a ten into 10 ones) before recording the subtraction.	Decompose mentally without disks; solve subtraction problems requiring two regroupings and explain each step in writing.
Apply Efficient Addition & Subtraction Strategies (Week 26)	Provide a strategy menu (number line, disks, mental math) for students to choose from, with teacher check-ins at each step.	Solve the same two-step problem using two different strategies and compare efficiency; justify the most efficient choice in writing.
Problem Solving with Coins and Bills (Week 27)	Use real or play coins and bills, sorting and counting by value before combining; start with a single coin type.	Solve word problems involving combinations of coins and bills that require regrouping (e.g., making change); create an original money word problem.

General Differentiation Toolkit

Support Strategies (Below Level / Emerging)

- Use concrete manipulatives (fraction pieces, demonstration clocks, place value disks) before moving to pictorial or abstract representations.
- Pre-teach vocabulary — especially fraction and geometry terms like "partition," "equal shares," and "decomposition" — using visuals before the whole-group lesson.
- Keep numbers within a smaller, familiar range (e.g., within 200) while a strategy is new, then extend to 1,000 once secure.
- Provide a completed worked example alongside a matching blank template for guided practice.
- Pair with a peer partner for turn-and-talk and modeling during hands-on shape, time, or place-value tasks.
- Break two-step word problems into smaller, sequenced steps with checkpoints.

Extension Strategies (Above Level)

- Extend addition/subtraction tasks beyond 1,000, or introduce problems requiring two regroupings.
- Challenge students to partition the same whole multiple ways and compare the size of each share.
- Ask students to justify in writing why one strategy is more efficient than another for a given problem.
- Have students create original word problems (time, shapes, or place value) for a partner to solve.
- Have students teach a strategy to a small group or lead a turn-and-talk explaining their reasoning.

Multilingual Learner / Language Support

- Pair new vocabulary (e.g., "partition," "decomposition," "efficiency," shape names) with gestures, visuals, and native-language cognates where possible.
- Use sentence frames for explaining reasoning: "I partitioned the whole into ___ equal parts." or "I used ___ because ___."
- Allow students to show understanding through drawings, manipulatives, or hands-on modeling before requiring a verbal or written explanation.
- Preview key vocabulary in a small group before it's introduced in the whole-class lesson.



Grade 2: **Mathematics**

Quarter 4: Curriculum & Pacing Guide

Quarter Overview

Students apply addition and subtraction skills to solve problems involving money, measurement, and data. They identify and determine the value of coins and bills, estimate and measure lengths using inches, feet, and yards, compare measurements, and represent measurement data on line plots.

Students then build foundations for multiplication and division by creating and counting equal groups, writing repeated-addition equations, organizing objects into rows and columns, and constructing rectangular arrays. They also use grouping, pairing, and skip-counting strategies to determine whether numbers are even or odd. These experiences prepare students for formal multiplication, division, and area concepts.

Essential Questions

- How can we determine and represent the value of a collection of coins and bills?
- How can addition and subtraction help us solve problems involving money?
- How do we choose an appropriate tool and unit for measuring length?
- How does the size of a measurement unit affect the numerical measurement?
- How can we estimate, measure, and compare lengths accurately?
- How can addition and subtraction help us solve measurement problems?
- How can measurement data be organized and represented on a line plot?
- How can graphs and line plots help us answer questions about data?
- What makes a group of objects an equal group?
- How can repeated addition represent equal groups?
- How can objects be organized into rows and columns?
- How do arrays help us find and represent a total?
- How can the same total be arranged or grouped in different ways?
- How can equal groups and arrays prepare us for multiplication and division?
- How can pairing and skip-counting help us determine whether a number is even or odd?
- How can models, drawings, and equations help us explain and justify our mathematical thinking?

Standards for Mathematical Practice (Used Throughout)

- MP1 — Make sense of problems and persevere in solving them
- MP2 — Reason abstractly and quantitatively
- MP3 — Construct viable arguments and critique the reasoning of others
- MP4 — Model with mathematics
- MP5 — Use appropriate tools strategically
- MP6 — Attend to precision
- MP7 — Look for and make use of structure
- MP8 — Look for and express regularity in repeated reasoning

Second Grade Quarter 4: *I can statements* (28-36 Weeks)

- I can determine and represent the value of a collection of coins and bills.
 - I can use addition and subtraction to solve problems involving money.
 - I can choose an appropriate tool and unit for measuring length (inches, feet, yards).
 - I can estimate, measure, and compare lengths accurately.
 - I can organize and represent measurement data on a line plot.
 - I can create equal groups and write repeated-addition equations to represent them.
 - I can organize objects into rows and columns to build an array.
 - I can use arrays to find and represent a total.
 - I can show that the same total can be arranged or grouped in different ways.
 - I can use pairing and skip-counting to tell if a number is even or odd.
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Module 5 Reference — Money, Data, and Customary Measurement (Weeks 28–30)

Standards Addressed

- CC.2.4.2.A.1 — Data & Measurement: measure and estimate lengths using customary units (inches, feet, yards)
- CC.2.4.2.A.3 — Data & Measurement: use addition and subtraction within 100 to solve word problems involving money
- CC.2.4.2.A.4 — Data & Measurement: represent and interpret measurement data using line plots
- CC.2.4.2.A.6 — Data & Measurement: use addition and subtraction to solve length/measurement problems
- CC.2.2.2.A.1 — Algebraic Concepts: use place value understanding and properties of operations to add and subtract
- CC.2.2.2.A.3 — Algebraic Concepts: use addition and subtraction within 100 to solve word problems involving money and measurement

Vocabulary

Familiar: benchmark, bill, cent, centimeter, change, coin, data, dime, dollar, estimate, exchange, length, measure, measurement, nickel, penny, quarter, ruler, scale, value

Academic: no new academic vocabulary introduced

Materials Needed

100-bead demonstration rekenrek · Cardstock, blank paper · Centimeter cubes · Chart paper, grid sheets · Color tiles · Crayons, dry erase markers, markers · Folders, glue sticks, pencils · Index cards · Whiteboards · Dimes, nickels, pennies, quarters · Plastic bags, scissors, stapler · Sticky notes, string, tape · Wood rulers

Curriculum Resources

Eureka Math² Module 5 Manual · [greatminds.org](https://www.greatminds.org) website · [Happy Numbers](#) · Student Learn Book — Module 5 / Teach Book

Content vocabulary for Module 5 (foot, inch, interval, line plot, yard) was introduced in Quarter 3 — see the Q3 guide.

Module 6 Reference — Multiplication and Division Foundations (Weeks 31–35)

Standards Addressed

- CC.2.2.2.A.1 — Algebraic Concepts: use place value understanding and properties of operations to add and subtract
- CC.2.2.2.A.2 — Algebraic Concepts: select and apply an efficient strategy to solve one- and two-step problems
- CC.2.2.2.A.3 — Algebraic Concepts: use addition (repeated addition) to represent and solve problems with equal groups and arrays
- CC.2.1.2.B.2 — Number & Operations: understand place value and use skip-counting/pairing strategies, including determining even and odd numbers
- CC.2.3.2.A.1 — Geometry: recognize and draw shapes with specified attributes, applied to rectangular arrays

Vocabulary

Content: array, column, equal groups, even number, odd number, repeated addition, row

Familiar: addend, attribute, compose, decompose, double, equation, horizontal, part, rectangle, square, sum, total, unit, vertical, whole

Academic: no new academic vocabulary introduced

Materials Needed

Calendar time tools (bundles of 10s/100s, skip counting, telling time, odd/even numbers, money & coin talk) · 100-bead demonstration rekenrek · Blank paper, chart paper · Chart markers · Colored pencils, pencils · Colored tiles · Dot dice (set of 12) · Dry erase markers, whiteboards, erasers · Envelopes · Scissors · Small paper clips · Sticky notes · Wood rulers (inch and metric)

Curriculum Resources

Eureka Math² Module 6 Manual · [greatminds.org](https://www.greatminds.org) website · [Happy Numbers](#) · Student Learn Book — Module 6 / Teach Book · Eureka Math² Numeral cards (set) · Eureka Math² measuring tapes

9-Week Pacing at a Glance

Wk	Module	Focus	Lessons This Week	Guiding Question(s)
28	Module 5	Money, Data, and Customary Measurement, continued	Lessons 3–7: Problem Solving with Coins and Bills	How can we determine and represent the value of a collection of coins and bills? How can addition and subtraction help us solve problems involving money?
29	Module 5	Money, Data, and Customary Measurement	Lessons 8–12: Use Customary Units to Measure and Estimate Length	How do we choose an appropriate tool and unit for measuring length? How does the size of a measurement unit affect the numerical measurement?
30	Module 5	Use Measurement and Data to Solve Problems; Unit 5 Module Assessment	Lessons 13–16: Use Measurement and Data to Solve Problems Unit 5 Module Assessment	How can we estimate, measure, and compare lengths accurately? How can measurement data be organized and represented on a line plot?
31	Module 6	Multiplication and Division Foundations	Lessons 1–3: Count and Problem Solve with Equal Groups	What makes a group of objects an equal group? How can repeated addition represent equal groups?
32	Module 6	Multiplication and Division Foundations	Lesson 4: Count and Problem Solve with Equal Groups Lessons 5–8: Arrays and Equal Groups	How can objects be organized into rows and columns? How do arrays help us find and represent a total?
33	Module 6	Multiplication and Division Foundations	Lessons 9–13: Rectangular Arrays as a Foundation for Multiplication and Division	How can the same total be arranged or grouped in different ways? How can equal groups and arrays prepare us for multiplication and division?
34	Module 6	Multiplication and Division Foundations	Lessons 14–18: The Meaning of Even and Odd Numbers	How can pairing and skip-counting help us determine whether a number is even or odd?

Wk	Module	Focus	Lessons This Week	Guiding Question(s)
35	Module 6	Module 6 Assessment • Begin End-of-Year Assessments	Module 6 Assessment *EOY Assessments	<i>Cumulative review and year-end assessment</i>
36	—	End of Year Assessments	*EOY Assessments	<i>Cumulative review and year-end assessment</i>

Differentiation Strategies by Topic

Quick supports and extensions teachers can pull from during each instructional block. Use alongside small-group time, centers, or independent work.

Topic	Support (Below Level)	Extension (Above Level)
Problem Solving with Coins and Bills (Week 28)	Use real or play coins/bills, sorting and counting by value before combining; start with a single coin type and small totals.	Solve word problems involving combinations of coins and bills that require making change; create an original money word problem.
Customary Units to Measure & Estimate Length (Week 29)	Use inch tiles or a ruler with inch marks highlighted; measure the same object with both inches and feet to see the relationship.	Choose the most appropriate customary unit (inch, foot, yard) for a given object and justify the choice; convert between units.
Use Measurement & Data to Solve Problems / Line Plots (Week 30)	Provide a partially completed line plot template; measure a small set of objects (4–5) together as a class before plotting independently.	Collect and plot a larger data set independently; write and answer comparison questions using the line plot ("how many more/fewer").
Count and Problem Solve with Equal Groups (Weeks 31–32)	Use real objects to build equal groups physically before writing the repeated-addition equation; keep group size and number of groups small (2–3).	Write both a repeated-addition equation and a matching multiplication expression informally; solve problems with larger or unequal-looking groups and explain why they are or aren't equal.
Arrays and Equal Groups (Week 32)	Build arrays with color tiles or counters in rows and columns, counting each row aloud before finding the total.	Find the total of an array two different ways (by rows and by columns) and explain why the total is the same; build arrays for a given total.
Rectangular Arrays for Multiplication/Division (Week 33)	Use grid paper to draw arrays with the rows and columns pre-marked; connect each array directly to a repeated-addition equation.	Decompose a larger array into two smaller arrays and find the total both ways; explain the connection between arrays and future multiplication.
The Meaning of Even and Odd Numbers (Week 34)	Use counters to physically pair objects, circling pairs and identifying any leftover; keep numbers small and consistent (under 20).	Determine even/odd for larger numbers using skip-counting or the ones-digit pattern without pairing objects; explain the pattern in writing.

General Differentiation Toolkit

Support Strategies (Below Level / Emerging)

- Use concrete manipulatives (coins and bills, rulers, color tiles, counters) before moving to pictorial or abstract representations.
- Pre-teach vocabulary — especially new terms like "array," "equal groups," and "repeated addition" — using visuals and hands-on modeling before the whole-group lesson.
- Keep group sizes, totals, or measurement numbers small and familiar while a skill is new, then extend once secure.
- Provide a completed worked example alongside a matching blank template for guided practice.
- Pair with a peer partner for turn-and-talk and modeling during hands-on money, measurement, or array tasks.
- Break multi-step word problems into smaller, sequenced steps with checkpoints.

Extension Strategies (Above Level)

- Extend money or measurement tasks to larger amounts, mixed units, or two-step problems.
- Challenge students to represent the same array or total in multiple ways (rows vs. columns, different group sizes) and explain why the total stays the same.
- Ask students to justify in writing why one strategy or unit choice is more efficient or precise than another.
- Have students create original data sets, line plots, or word problems for a partner to solve.
- Have students teach a strategy to a small group or lead a turn-and-talk explaining their reasoning.

Multilingual Learner / Language Support

- Pair new vocabulary (e.g., "array," "equal groups," "benchmark," coin names) with gestures, visuals, and native-language cognates where possible.
- Use sentence frames for explaining reasoning: "There are ___ groups of ___, so the total is ___." or "I used ___ because ___."
- Allow students to show understanding through drawings, manipulatives, or hands-on counting before requiring a verbal or written explanation.
- Preview key vocabulary in a small group before it's introduced in the whole-class lesson.