

Comparing 1st and 2nd Edition Grade 2 Units: Where Is It Now?

The following describes the work of the second edition, in relation to the first edition. Note that, while many first edition activities are part of the second edition, they may be presented and used differently.

Unit 1: Counting, Coins, and Combinations (Addition, Subtraction, and The Number System 1)

Investigation 1: Introducing Math Tools and Routines	Much of these Investigations come from <i>Mathematical Thinking at Grade 2</i> . In addition, they introduce: a new Routine, <i>What Time Is It?</i> ; the number line as an important tool; the Plus 1 and Plus 2 Combinations, and the Combinations That Make 10; and a process for achieving fluency with those combinations that includes sorting Addition Combination Cards and writing clues for the ones that are hard-to-remember.
Investigation 2: Counting and Coins	
Investigation 3: Combinations of 10	
Investigation 4: Addition and Subtraction Situations	

Unit 2: Shapes, Blocks, and Symmetry (2D and 3D Geometry)

Investigation 1: Features of 2-D and 3-D Shapes	In addition to new material (e.g. the Doubles Combinations and making boxes from rectangles), this unit is based in large part on Investigation 3 of <i>Mathematical Thinking at Grade 2</i> and Investigations 1, 2, and 4 of <i>Shapes, Halves, and Symmetry</i> , including the work with the <i>Shapes</i> software.
Investigation 2: What Is a Rectangle?	
Investigation 3: Symmetry	

Unit 3: Stickers, Number Strings, and Story Problems (Addition, Subtraction, and The Number System 2)

Investigation 1: Adding More Than Two Numbers	Much of this Investigation—which also explores whether order matters in addition, and introduces the Near Doubles—is based on Investigation 1 of <i>Coins, Coupons, and Combinations</i> .
Investigation 2: Addition and Subtraction	This Investigation is based on the story problem work in Investigations 1 and 3 of <i>Putting Together and Taking Apart</i> .
Investigation 3: Counting by 2s, 5s, and 10s	This Investigation, which is based largely on Investigation 2 of <i>Putting Together and Taking Apart</i> , also includes work on even and odd numbers, content that was in third grade in the first edition.
Investigation 4: Place Value	Much of this Investigation is new, including the introduction of the Plus 10 Combinations and of a context for modeling the base-10 structure of our number system—stickers that come singly, in strips of 10, or in sheets of 100.

Unit 4: Pockets, Teeth, and Favorite Things (Data Analysis)

Investigation 1: Categorical Data: Sorting People, Yekttiis, and Favorite Things	This Investigation is based in large part on the Guess My Rule work from <i>Mathematical Thinking at Grade 2</i> , and on Investigation 1 of <i>Does It Walk, Crawl, or Swim?</i> . A data project about Favorite Things is included.
Investigation 2: Numerical Data: Pockets and Teeth	This Investigation is based on the unit <i>How Many Pockets? How Many Teeth?</i> . The Plus 10 Combinations, which were introduced in Unit 3, are assessed in this unit.

Unit 5: How Many Floors? How Many Rooms? (Patterns, Functions, and Change)

Investigation 1: Growing Patterns: Ratio and Equal Groups	This Investigation is based, in part, on material from Investigation 1 of <i>Shapes, Halves, and Symmetry</i> .
Investigation 2: Repeating Patterns and Number Sequences	Much of this Investigation is new, including work with repeating patterns and number sequences (e.g. counting by 2's and 3's).

Unit 6: How Many Tens? How Many Ones? (Addition, Subtraction, and The Number System 3)

Investigation 1: Working with Tens and Ones	This Investigation—which focuses on adding and subtracting with stickers—is new.
Investigation 2: Working with 100	In addition to new content (e.g. Guess My Number on the 100 Chart, Missing Numbers, Unroll-a-Square, Spend \$1.00, and the work with making 100 with equal groups), these Investigations include material from Investigation 4 of <i>Coins, Coupons, and Combinations</i> and Investigations 2 and 4 of <i>Putting Together and Taking Apart</i> .
Investigation 3: Adding to and Subtracting from 100	
Investigation 4: Making 100 with Equal Groups	

Unit 7: Parts of a Whole, Parts of a Group (Fractions)

Investigation 1: One Half	This unit is based, in part, on the work with fractions in Investigation 3 of <i>Shapes, Halves, and Symmetry</i> . The new work focuses on fractions of sets, a wider range of fractions (e.g. non-unit fractions like $\frac{2}{3}$ and $\frac{2}{4}$ and mixed numbers like $1\frac{1}{2}$), and fraction notation, with a focus on what the numbers represent.
Investigation 2: Halves, Thirds, and Fourths	

Unit 8: Partners, Teams, and Paper Clips (Addition, Subtraction, and The Number System 4)

Investigation 1: Adding Even and Odd Numbers	This Investigation focuses on what happens when different combinations of even and odd numbers are added together, content that was in third grade in the first edition.
Investigation 2: Remaining Addition Combinations	This Investigation is new and focuses on the remaining Addition Combinations: the Plus 9 Combinations and the Remaining Combinations.
Investigation 3: Subtraction	These Investigations build on and extend the work with addition and subtraction from <i>Putting Together and Taking Apart</i> .
Investigation 4: Addition	

Unit 9: Measuring Length and Time (Measurement)

Investigation 1: Different Units, Different Counts	In addition to new material (e.g. comparison problems and “The Land of Inch”), these Investigations are based on Investigation 1 of <i>How Long? How Far?</i> and Investigation 2 of the Grade 3 Unit <i>From Paces to Feet</i> .
Investigation 2: Creating a Measuring Tool	
Investigation 3: Two Measurement Systems	
Investigation 4: Representing Time	This Investigation is based, in part, on Investigation 1 of <i>Timelines and Rhythm Patterns</i> .

Classroom Routines

What Time Is It?	This Routine, focused on learning to tell time to the quarter hour, is based in part on the first edition Routine: Time and Time Again.
Today’s Number	This is basically the first edition Routine: Today’s Number. Note that, instead of being tied to the number of days in school, a number and variation is suggested each day.
How Many Pockets?	This Routine is basically the first edition How Many Pockets? Routine.
Quick Images	While Quick Images was a first edition activity, including it as a Classroom Routine is new.

Comparing 1st and 2nd Edition Grade 2 Units: What’s Gone?

The following first edition activities and/or Investigations no longer appear in the second edition of the Grade 2 *Investigations* curriculum. Note that some content has moved to other grade levels.

Mathematical Thinking at Grade 2 (Introduction)

- Weekly Logs.
- Mystery Photos.
- Ways to Get to 12. (Work on composition of numbers is still a major emphasis in grade 2.)
- The Classroom Inventory. (Counting continues to be a focus in grade 2.)

Coins, Coupons, and Combinations (The Number System)

- *Book of 10*. (The work on combinations of 10 is still a grade 2 topic; they are reviewed in the first unit.)
- People and Pet Riddles.
- Matching Coins to Coupons & Shop and Save. (Work with coin values and equivalencies is still a focus in grade 2.)

Does It Walk Crawl or Swim? (Sorting and Classifying Data)

- Thing Collections.
- Sink and Float.
- Animals in the Neighborhood.
- Scary Things.

Shapes, Halves, and Symmetry (Geometry and Fractions)

- Covering Pattern Blocks.
- The Last Block Game.

Putting Together and Taking Apart (Addition and Subtraction)

- Emma’s Animals: Writing and Sharing Stories about 100. (Work with the composition of 100 is still central.)
- Capture 5. (This is suggested as an extension towards the end of Grade 2, to support the Range of Learners. All students play this game—and several variations of it—in Grade 3.)
- Story Problems about Comparison. (However, students solve comparison problems in the measurement unit.)

How Long? How Far? (Measurement)

- Measurement Riddles.
- Investigation 2: Paths and *Geo-Logo*.

How Many Pockets? How Many Teeth? (Collecting and Representing Data)

- Quick Data Collections.
- Class Surveys.
- Investigation 3: Data Projects. (However, students conduct two data projects—about “favorite things” and other class’s lost teeth—and choose their own topic in the “favorite things” survey.)

Timelines and Rhythm Patterns (Changes)

- Investigation 2: Rhythm Patterns. (However, some work with rhythm patterns is built into the patterns and functions unit.)

Classroom Routines

- Today’s Number no longer includes a class counting strip, nor a 200 chart.