Overall Structure

1. **Explore, Play, and Discuss**: These activities provide opportunities for students to explore the initial ideas of the section. This section can be completed asynchronously using digital manipulatives and response tools, or using physical manipulatives and the student workbook pages with guiding questions for caregivers. If planning for a section per week, these activities would ideally be assigned earlier in the week.

2. **Deep Dive**: These activities are key learning opportunities for students around the section goals. **If there are chances for in-person or virtual synchronous time, these would be the activities to do collaboratively to share ideas and build community.** If done asynchronously, opportunities to view and respond to peer work or sample student work as well as receive feedback from teachers (and perhaps peers), is essential for these activities. Formative assessment is also a part of this section to check in on student understanding. If planning for a section per week, these activities would ideally be done mid-week.

3. **Synthesize and Apply**: These activities are ways for students to synthesize the learning of the section and for teachers to assess student understanding toward the section learning goals. These activities can be completed asynchronously, with either written, in-person, or automated feedback. If planning for a section per week, these activities would ideally be done toward the end of the section.

4. **Ongoing Practice**: These provide opportunities for students to practice unit topic ideas and build toward computational fluency. In K–5, the activities in this section are typically practice problems and center games that can be played independently, with a family member, or with classmates. In IM 6–12, each lesson includes a distributed practice set. Many existing digital platforms already have IM 6–12 practice problems loaded in so that students can complete and submit them online. Some can be autoscored.

5. **Anytime Resources:** The activities in this section have the flexibility to be used anytime during a section. In K–5, these are center activities that provide opportunities for students to build computational fluency across the year. In 6–12, these activities are modeling prompts that offer students the opportunities to engage in mathematical modeling.

Grade 3, Unit 3: Wrapping Up 1,000

Abbreviated Unit Narrative

In this unit, students wrap up the work of addition and subtraction within 1,000. In grade 2, students added and subtracted within 1,000 using strategies based on place value, the relationship between addition and subtraction and properties of operations. In this unit, students learn algorithms based on place value and continue to use mental math strategies developed in grade 2.

The work of grade 3 requires that students can fluently add and subtract within 1,000. To move students toward fluency, they learn a few different algorithms that work with any numbers and are generalizable to larger numbers and decimal numbers. Students work with a variety of algorithms that use expanded form as they learn to condense recording addition and subtraction with and without composing tens and hundreds. Although various algorithms are provided, students are not required to use a specific algorithm. However, in this unit, they move from strategy-based work of grade 2 to algorithm-based work in order to set the stage for using the standard algorithm in grade 4.

In the last section of the unit, students use their place value understanding to round numbers to the nearest multiple of 10 and 100. They use rounding in order to estimate answers to two-step problems before solving them.

Section A Goals

- Identify arithmetic patterns and explain them using properties of operations.
- Use place value understanding to compose and decompose numbers.

In the first section, students prepare to add and subtract within 1,000 by revisiting ideas from grade 2. Students look for arithmetic patterns in addition which gives them a chance to revisit the fluency expectations from grade 2 that students know from memory all single digit sums. In looking at the patterns, they may use the associative property. Students also revisit place value work with numbers within 1,000 and consider different ways to decompose numbers which will be useful in future sections.

This section also gives teachers an opportunity to see what strategies students use to add and subtract within 1,000.

	Activity Suggestions	Assessment Suggestions

Explore, Play, and Discuss	• Lesson 1, Warm-up and Activity 1
	  ○ Can be combined into 1 activity because they might notice some patterns in the warm-up. In Activity 1, you can prompt students to look for additional patterns that show up when the rest of the table is complete.
	• Scavenger Hunt (optional)
	  ○ Example items:
	  ■ Find objects or pictures that show a pattern of adding 2 each time.
	  ■ Find objects or pictures that show a pattern of doubling.
		• Lesson 1, Cool-down

	Activity Suggestions	Assessment Suggestions

Deep Dive	• Lesson 2, Warm-up
	• Lesson 2, Activity 1 (Card Sort)
	• Lesson 2, Activity 2
	  ○ If it is helpful for students completing this activity digitally, include access to these digital base 10 blocks.
	• Revisit the Math Community poster.
	  ○ Ask students which actions they experienced in today's lesson and if they would like anything to the poster based on their experiences.
		• Lesson 2, Cool-down
		• Lesson 3, Activity 2
		  ○ This is a journal prompt that can be combined with the Lesson 2 Cool-down.

	Activity Suggestions	Assessment Suggestions
Synthesize and Apply	• Lesson 3, Warm-up • Lesson 3, Activity 1 • Read Student Lesson Summary ○ Consider recording a video of the summary if assigning to be done asynchronously.	• Section A Checkpoint

Ongoing Practice	

	• Practice Problems
	  ○ Pre-unit
	  ○ Lesson
	• Center: Close to 100, Stages 1-3

Anytime Resources	
	• Exploration Problems • Center: Multiplication Card Sort, Stage 2 • Center: Multiplication Concentration, Stage 3 • Center: Rectangle Rumble, Stage 3 • IM Talking Math

Section B Goals

- Fluently add within 1,000 using algorithms based on place value and properties of operations.

Students then use their place value understanding from grade 2 to continue the work on addition within 1,000. Base-ten diagrams are used to support student understanding as they progress to more abstract ways of representing addition. Students build on strategies based on place value and properties of operations toward more formal algorithms that are based on these same concepts.

Explore, Play, and Discuss	**Activity Suggestions** • Lesson 5, Warm-up • Lesson 4, Activity 1 and 2 • Lesson 6, Warm-up ○ This is not related to the work of this section, but revisits multiplication from Units 1-2 that will be helpful for students in Unit 4.	**Assessment Suggestions** • Lesson 4, Cool-down

Deep Dive	**Activity Suggestions**
	• Lesson 4, Warm-up
	• Lesson 5, Activity 1
	  ○ If time, consider moving some problems from Lesson 5, Activity 2 for more practice. If there is not enough time, it can be done in the Synthesis and Apply section.
	• Lesson 6, Activity 1
	  ○ If time, consider moving a problem or 2 from Lesson 6, Activity 2 for more practice.
	• Lesson 7, Activity 1
	  ○ If there is not enough time for this entire activity, consider reducing or eliminating the practice in problem 2.
		Assessment Suggestions
		• Lesson 6, Cool-down

Synthesize and Apply	**Activity Suggestions** • Lesson 5, Activity 2 • Lesson 7, Activity 2 • Read Student Lesson Summary	**Assessment Suggestions** • Section B Checkpoint

Ongoing Practice	• Lesson 6, Activity 2 • Practice Problems • Center: The Least and Greatest of them All, Stage 1 • Center: Place Value Targets, Stage 1

Anytime Resources	• Exploration Problems • Center: Multiplication Card Sort, Stage 2 • Center: Multiplication Concentration, Stage 3 • Center: Rectangle Rumble, Stage 3 • IM Talking Math

Section C Goals

- Fluently subtract within 1,000 using algorithms based on place value, properties of operations and the relationship between addition and subtraction.

In this section, students build on their work with addition algorithms to analyze and use subtraction algorithms. Students begin by working with base-ten blocks and diagrams, however, since it is difficult to record regrouping using drawings, the algorithm becomes a helpful way to find differences. Students make sense of a subtraction algorithm that uses expanded form to show how numbers are being regrouped.

Explore, Play, and Discuss	**Activity Suggestions**	**Assessment Suggestions**

	• Lesson 8, Warm-up
	• Lesson 8, Activity 1
	• Lesson 8, Activity 2
	  ○ This could be made into a card-matching activity.
	• Lesson 9, Warm-up
		• Lesson 8, Cool-down
		  ○ Consider offering students these digital base ten blocks if needed to solve or to check their response.

Deep Dive	**Activity Suggestions**	**Assessment Suggestions**
	• Lesson 11, Warm-up • Lesson 9, Activity 1 • Lesson 11, Activity 1 • If time, Lesson 12, Activity 2 ○ This activity introduces subtraction over zeros.	• Lesson 11, Cool-down

Synthesize and Apply	**Activity Suggestions** • Lesson 9, Activity 2 • Lesson 10, Activity 2 ○ If assigning the practice problems for this section, consider skipping this activity. • Lesson 11, Activity 2 • Read Student Lesson Summary	**Assessment Suggestions** • Section C Checkpoint

Ongoing Practice	• Practice Problems • Center: Place Value Targets, Stage 2 • Center: The Least and Greatest of them All, Stage 2

Anytime Resources	• Exploration Problems • Center: Multiplication Card Sort, Stage 2 • Center: Multiplication Concentration, Stage 3 • Center: Rectangle Rumble, Stage 3 • IM Talking Math

Section D Goals

- Round whole numbers to the nearest multiple of 10 and 100.
- Assess the reasonableness of answers.
- Solve two-step word problems using addition, subtraction, and multiplication.

In this section students build on their place value understanding to learn the conventions of rounding whole numbers to the nearest multiple of 10 or 100. The number line diagram is used to help students think about which multiple of 10 or 100 a given number is closest to.

Students also think about the reasonableness of answers and use rounding to estimate. They build a foundation of understanding for more complex problems as they match situations to tape diagrams and write equations that correspond. Finally, students apply what they've learned about adding and subtracting within 1,000 to solve two-step word problems that involve multiplication, addition, and subtraction. Students have worked with diagrams and equations with a ? or ___ to represent an unknown. Students interpret and write letters to stand for the unknown.

	Activity Suggestions	Assessment Suggestions

Explore, Play, and Discuss	• Lesson 17, Warm-up
	• Lesson 14, Activity 1
	  ○ Collect students' responses to use in the Deep Dive section activities.
	• Lesson 18, Activity 1
	  ○ If students are not familiar with the tape diagram, add the Warm-up from this lesson as the launch to Activity 1.
		• Lesson 18, Cool-down

	Activity Suggestions	Assessment Suggestions

Deep Dive	• Lesson 15, Warm-up
	• Leverage students' ideas about "close to" from Lesson 14, Activity 1 in the Explore section to introduce rounding from the Activity 1 synthesis.
	• Lesson 14, Activity 2 and Lesson 15, Activity 2
	  ○ Can be combined into 1 activity.
	• Lesson 17, Activity 1
	• Lesson 19, Warm-up and Activity 1
	  ○ Can be combined into 1 activity. The warm-up could be the launch and Activity
		• Lesson 15 and 19, Cool-down
		  ○ Combine into 1 cool-down.

	1 could be created as a card matching activity.	

Synthesize and Apply	**Activity Suggestions** • Lesson 15, Activity 1 • Lesson 19, Activity 2 • Read Student Lesson Summary	**Assessment Suggestions** • Section D Checkpoint

Ongoing Practice	• Lesson 16, Activity 1 • Practice Problems • Center: Tic Tac Round, Stages 1 and 2 • Center: Compare Expressions, Stage 1

Anytime Resources	• Exploration Problems • Center: Multiplication Card Sort, Stage 2 • Center: Multiplication Concentration, Stage 3 • Center: Rectangle Rumble, Stage 3 • IM Talking Math