Third Grade Go Math Lessons

Quarter 1	**Back to School/Getting to Know You Activities** **Second Grade Prerequisite Skills Assessment** (Optional) **Beginning of the Year Assessment** (Optional) **Multiplication/Division Math Fact Fluency Assessments** (Required) Beginning year assessments need to be completed within the first three weeks of school. **Chapter 1 Show What You Know and Vocabulary Builder/Lesson 1.1**: *Algebra * Number Patterns (Optional: Skip Lesson 1.1 because it aligns to 1.OA.B.3 and 2.OA.C.3.)* **Lesson 1.2**: *Round to the Nearest Ten or Hundred* **Lesson 1.3**: *Estimate Sums (Modify: Don't introduce compatible numbers.)* **Lesson 1.4**: *Mental Math Strategies for Addition (Optional: Skip lesson because 3.NBT.A.2 requires students to fluently add and subtract within 1000. Numbers in the lesson do not move students toward fluency with the size of numbers expected for Grade 3.)* **Lesson 1.5**: *Algebra * Use Properties to Add (Students need not use formal terms for these properties per new standard. Optional: Skip lesson because it aligns to 2.NBT.B.6)*

Lesson 1.6: *Use the Break Apart Strategy to Add* (Optional: Condense lessons 1.6 and 1.7 to make the connection between breaking apart to add and the standard algorithm.

Lesson 1.7: *Use Place Value to Add (Optional: Add* Learn Zillion Unit 3 Lesson 7 *)* Extra practice with addition computation to meet fluency expectations:

- Add a three-digit and two-digit number so that the total is within 1000
Add two three-digit numbers so that the total is within 1000

Chapter 1 Mid-Chapter Checkpoint

Lesson 1.8: *Estimating Differences (Modify: Don't introduce compatible numbers.)*

Lesson 1.9: *Mental Math Strategies for Subtraction (Optional: Skip lesson because 3.NBT.A.2 requires students to fluently add and subtract within 1000. Numbers in the lesson do not move students toward fluency with the size of numbers expected for Grade 3.)*

Lesson 1.10: *Use Place Value to Subtract*

Lesson 1.11: *Combine Place Values to Subtract (Optional: Add* practice with subtraction computation to meet fluency expectations. Resources: Subtract 2-Digit from 3-Digit Number with Regrouping ; Subtract 3-digit from 3-digit number; Subtract 3-Digit from 3-Digit Number with Regrouping

Balance the 3-Digit Addition or Subtraction Equation

Lesson 1.12: *Problem Solving * Model Addition and Subtraction (Optional: Skip lesson because n*umbers are smaller than Grade 3 expectations (3.NBT.A.2 and 3.OA.D.8). Instead, add *practice* with one- and two-step word problems involving addition and subtraction. Resources: Two-step word problems

(Focus on solving word problems by adding and subtracting within 100, dollars and cents with cents, not using dollars and cents simultaneously, using the $ and ¢ symbols appropriately, not including decimal notation. We will move this to Chapter 1 next year!)

Chapter 1 Review

Chapter 1 Assessment

Chapter 2 Show What You Know and Vocabulary Builder/Lesson 2.1: *Problem Solving * Organize Data (Optional: Skip this lesson because graphing aligns to 2.MD.D.10; tally mark charts are not an expectation of the standards.)*

Lesson 2.2: *Use Picture Graphs (Optional: Combine 2.2 and 2.3)*

Lesson 2.3: *Make Picture Graphs*

Chapter 2 Mid-Chapter Checkpoint

Lesson 2.4: *Use Picture Graphs (Optional: Combine 2.4 and 2.5)*

Lesson 2.5: *Make Picture Graphs*

Lesson 2.6: *Solve Problems Using Data*

Lesson 2.7: *Use and Make Line Plots*

Chapter 2 Review

Chapter 2 Assessment

Chapter 3 Show What You Know and Vocabulary Builder/Lesson 3.1: *Equal Groups*

Lesson 3.2: *Algebra * Relate Addition and Multiplication*

	Lesson 3.3: *Skip Count on a Number Line (Optional: Skip Lesson 3.3 because number line is not a requirement of 3.OA.A or 3.OA.B work. The abstract representation does not allow students to develop an understanding of the meaning of multiplication as defined in 3.OA.A.1.)*
	Chapter 3 Mid-Chapter Checkpoint
	Lesson 3.4: *Problem Solving * Model Multiplication (Optional: Do not teach until Chapter 4 and replace with lesson about connecting equal groups to arrays:* Engage NY, Module 1, Lesson 2)
	Lesson 3.5: *Model with Arrays (Optional: Combine 3.5 and 3.6)*
	Lesson 3.6: *Algebra * Commutative Property of Multiplication*
	Lesson 3.7: *Algebra * Multiply with 1 and 0*
	Chapter 3 Review
	Chapter 3 Assessment
Quarter 2	**Chapter 4 Show What You Know and Vocabulary Builder/Lesson 4.1**: *Multiply (2&4)*
	Lesson 4.2: *Multiply with 5 and 10*
	Lesson 4.3: *Multiple with 3 and 6 (Optional: Add Lesson about the concept of distributive property:* Engage NY, Module 1, Lesson 9 *and Lesson about connecting arrays to the distributive property:* Engage NY, Module 1, Lesson 10)
	Lesson 4.4: *Distributive Property (Optional: Combine 4.4 and 4.5)*
	Lesson 4.5: *Multiply with 7/**Mid-Chapter Checkpoint** to be combined same day as 4.5 or 4.6*

Lesson 4.6: *Associative Property of Multiplication*

Lesson 4.7: *Algebra * Patterns on the Multiplication Table*

Lesson 4.8: *Multiply with 8*

Lesson 4.9: *Multiply with 9 (Optional Add: Lesson 3.4)*

Lesson 4.10: *Problem Solving * Multiplication (De-emphasize the focus on the table and use this lesson to provide more practice with students solving two-step problems in context.)*

Chapter 4 Review

Chapter 4 Assessment

Chapter 5 Show What You Know and Vocabulary Builder/Lesson 5.1: *Algebra * Describe Patterns*

Lesson 5.2: *Algebra * Find Unknown Factors (Optional: Move to End of Chapter because 3.OA.A.4 is the bridge between 3.OA.A.1 and 3.OA.A.2. Moving to the end of chapter allows students to connect the work to the focus on division in the next chapter.)/**Mid-Chapter Checkpoint** to be combined same day as 5.2 or 5.3*

Lesson 5.3: *Problem Solving * Use the Distributive Property (Optional: Combine 5.3 and 5.4)*

Lesson 5.4: *Multiplication Strategies with Multiples of 10*

Lesson 5.5: *Multiply Multiples of 10 by 1-Digit (Optional: Add Lesson 5.2)*

Chapter 5 Review

Chapter 5 Assessment

Chapter 6 Show What You Know and Vocabulary Builder/Lesson 6.1: *Problem Solving * Model Division*

Lesson 6.2: *Size of Equal Group*

Lesson 6.3: *Number of Equal Groups*

Lesson 6.4: *Model with Bar Models (Introducing division notation)*

Lesson 6.5: *Algebra * Relate Subtraction and Division (Optional: Skip this lesson because* 3.OA.C.7 *asks for fluency and this lesson works against it.)* /**Mid-Chapter Checkpoint** *to be combined same day as 6.5 or 6.6*

Lesson 6.6: *Investigate * Model with Arrays*

Lesson 6.7: *Algebra * Relate Multiplication & Division*

Lesson 6.8: *Algebra * Write Related Facts*

Lesson 6.9: *Algebra * Division Rules for 1 and 0*

Chapter 6 Review

Chapter 6 Assessment

Chapter 7 will be taught following Chapter 12 instruction.

Chapter 8 Show What You Know and Vocabulary Builder/Lesson 8.1: *Equal Parts of a Whole (Optional: Do not teach lesson 8.1 because it is* More aligned to 2.G.A.3 than Grade 3 expectations. *Instead, add lesson about naming fractions that builds on grade 2 work and extends to denominators of sixths, eighths:* [Learn Zillion, Unit 4, Lesson 2](#)*)(continued on next page)*

	[Note: Teachers may need to skip the number line representation, as this doesn't connect to 2nd grade work.] & **Lesson 8.2:** *Equal Shares (Optional: Do not teach; Aligns to 5.NF.B.3)* **Lesson 8.3:** *Unit Fractions of a Whole* **Lesson 8.4:** *Fractions of a Whole* ***Lesson 8.5**: Fractions on a Number Line (Optional: Add Lesson about placing fractions on a number line between 0 and 1: Engage NY, Module 5, Lesson 16 and Lesson about placing fractions on a number line, including fractions greater than 1: Engage NY, Module 5, Lesson 17) /**Mid-Chapter Checkpoint** to be combined same day as 8.5 or 8.6* (Additional task to use: Illustrative Mathematics, Locating Fractions Greater than One on the Number Line) **Lesson 8.6:** *Relate Fractions and Whole Numbers (Optional: Modify by increasing emphasis on number line by showing or having kids use a number line in addition to the area models.)* **Lesson 8.7:** *Fractions of a Group (Optional: Skip lesson; Aligns to 5.NF.B.4)* **Lesson 8.8:** Find Part of a Group Using Unit Fractions *(Optional: Skip lesson; Aligns to 5.NF.B.4)* **Lesson 8.9:** *Problem Solving * Find the Whole Group Using Unit Fractions (Optional: Skip lesson; Aligns to 5.NF.B.4)* **Chapter 8 Review** **Chapter 8 Assessment**
Quarter 3	**Chapter 9 Show What You Know and Vocabulary Builder/Lesson 9.1:** *Problem Solving * Compare Fractions (Optional:* Spend 2 days on this lesson. (Chapter At A

(Start with Chapter 9)	Glance recommends 1-2 days. Make concrete models and number lines available for students to use to solve the problem.) **Lesson 9.2:** *Compare Fractions with the same Denominator* **Lesson 9.3:** *Compare Fractions with the same Numerator* **Lesson 9.4:** *Compare Fractions (Optional: Skip lesson because 3.NF.A.3d only requires comparing fractions with the same numerator or denominator; this lesson includes all different fractions. Instead, add lessons about comparing fractions, including fractions greater than 1 using the number line:* Engage NY, Module 5, Lesson 18 *and* Engage NY, Module 5, Lesson 19. *Practice with comparing fractions:* Illustrative Mathematics, Comparing Fractions Game)**/Mid-Chapter Checkpoint** *to be combined same day as 9.4 or 9.5* **Lesson 9.5:** *Compare and Order Fractions (Optional: Skip lesson because 3.NF.A.3d only asks for students to compare two fractions; this requires ordering.)* **Lesson 9.6:** *Investigate * Model Equivalent Fractions* **Lesson 9.7:** *Equivalent Fractions (Optional: Skip lesson because 3.NF.A.3b requires students to generate equivalent fraction; this lesson also does not allow students to explain why the fractions are equivalent. Instead, add Lesson about generating equivalent fractions using models:* Engage NY, Module 5, Lesson 22. *Practice generating and recognizing equivalent fractions:* Learn Zillion, Unit 10, Lesson 9 *[Note: Limit denominators to those required by 3.NF. (Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)]* Additional task to use: Illustrative Mathematics, Halves, Thirds and Sixths **Chapter 9 Review (1 day) and Chapter 9 Assessment (1 day)**

Chapter 10 Show What You Know and Vocabulary Builder/Lesson 10.1: *Time to the Minute*

Lesson 10.2: *A.M. and P.M. (Optional: Skip lesson because it aligns to 2.MD.C.7)*

Lesson 10.3: *Measure Time Intervals*

Lesson 10.4: *Use Time Intervals*

Lesson 10.5: *Problem Solving * Time Intervals (Optional: Skip lesson because it aligns more to 4.MD.A.2. 3.MD.A.1 limits to problems that do not cross the hour marks.*
Mid-Chapter Checkpoint *to be combined same day as 10.5 or 10.6*

Lesson 10.6: *Measure Length*

Lesson 10.7: *Estimate and Measure Liquid Volume*

Lesson 10.8: *Estimate and Measure Mass*

Lesson 10.9: *Solve Problems About Liquid Volume and Mass (Optional: Condense the following two lessons to give students more practice with one-step word problems involving measurement:*

- [Learn Zillion, Unit 6, Lesson 6](#)
- [Learn Zillion, Unit 14, Lesson 8](#)

Teachers should mix up problems from the two lessons to give students practice with all four operations at once.

Chapter 10 Review

Chapter 10 Assessment

Chapter 11 Show What You Know and Vocabulary Builder/Lesson 11.1: *Investigate * Model Perimeter*

Lesson 11.2: *Find Perimeter*

Lesson 11.3: *Algebra * Find Unknown Side Lengths*

Lesson 11.4: *Understand Area*

Lesson 11.5: *Measure Area*

Lesson 11.6: *Use Area Models/**Mid-Chapter Checkpoint** to be combined same day as 11.6 or 11.7*

Lesson 11.7: *Problem Solving * Area of Rectangles (Optional: Skip lesson because it includes multiplicative comparison (4.OA.A.1) and does not ensure that students are multiplying (3.MD.C.7b) because grids are provided. Instead, add the following lesson about directly connecting area to multiplication by moving away from using grids:* Go Math, Grade 4, Lesson 13.2 and *this lesson about using tiling to relate the distributive property to area:* Learn Zillion, Unit 9, Lesson 4)) *Additional resource:* Engage NY, Module 4 Lesson 7

 Lesson 11.8: *Area of Combined Rectangles (Optional: Skip lesson because it doesn't get to the full depth of 3.MD.7c or 3.MD.7d. Instead, add the following lesson about identifying area as additive:* Go Math, Grade 4, Lesson 13.3)

 Additional resources available:

- Illustrative Mathematics, Three Hidden Rectangles
Learn Zillion, Unit 9, Lesson 9

Lesson 11.9: *Same Perimeter, Different Areas*

Lesson 11.10: *Same Area, Different Perimeters (Optional: Add lesson practicing with word problems involving area/perimeter:* Engage NY, Module 7, Lesson 28)

Chapter 11 Review (1 day) and Chapter 11 Assessment (1 day)

	Chapter 12 Show What You Know and Vocabulary Builder/Lesson 12.1: *Describe Plane Shapes (Optional: Skip lesson because* vocabulary required aligns to expectations of 4.G.A)
	Lesson 12.2: *Describe Angles in Plane Shapes (Optional: Skip lesson because* vocabulary required aligns to expectations of 4.G.A)
	Lesson 12.3: *Identify Polygons*
	Lesson 12.4: *Describe Sides of Polygons*/**Mid-Chapter Checkpoint** *to be combined same day as 12.4 or 12.5*
	Lesson 12.5: *Classify Quadrilaterals*
	Lesson 12.6: *Draw Quadrilaterals*
	Lesson 12.7: *Describe Triangles (Optional: Skip lesson because it is m*ore aligned to 4.G.A.2)
	Lesson 12.8: *Problem Solving * Classify Plane Shapes (Optional: Skip lesson because* 3.G.A.1 is fully addressed in the other lessons in this unit and this is Supporting Work.)
	Lesson 12.9: *Investigate * Relate Shapes, Fractions and Area*
	Chapter 12 Review
	Chapter 12 Assessment
Quarter 4	(Optional: Teach Chapter 7 After AIR Prep and Testing) **Chapter 7 Show What You Know & Vocabulary Builder/Lesson 7.1:** *Divide by 2 (Optional: Combine 7.1 and 7.5)*
	Lesson 7.2: *Divide by 10 (Optional: Combine 7.2 and 7.3*
	Lesson 7.3: *Divide by 5*
	Lesson 7.4: *Divide by 3 (Optional: Combine 7.4 and 7.6)*

Lesson 7.5: *Divide by 4*

Lesson 7.6: *Divide by 6/**Mid-Chapter Checkpoint** to be combined same day as 7.6 or 7.7*

Lesson 7.7: *Divide by 7 (Optional: Combine 7.7 and 7.8)*

Lesson 7.8: *Divide by 8*

Lesson 7.9: *Divide by 9 (Optional:* Add Lesson with mixed practice with 2-step problems, including all four operations and using variables: Learn Zillion, Unit 15, Lesson 8 and Extra practice with multi-step problems: CPALMS: Getting the hang of two-step word problems)

Lesson 7.10: *Problem Solving * Two-Step Problems (Modify:* Throughout the lesson, students should write an equation to represent the word problem. Teachers should bring up using parentheses to make the equation align to the word problem, when it matches work presented by students.)

Lesson 7.11: Investigate * Order of Operations (Optional: Do not teach/Not in Grade 3 standards; more aligned to 5.OA.A.1. For more information about Order of Operations and appropriate notation for Grade 3, see CC/OA Progression, p. 27.)

Chapter 7 Review

Chapter 7 Assessment

AIR Prep

Math AIR (check dates for AIR Window)

Getting Ready for 4th Grade Lessons
Lesson 1: *Numbers to Ten Thousand*
Lesson 2: *Read and Write Numbers to Ten Thousand*

Lesson 3: *Relative Size on a Number Line*
Lesson 4: *Compare 3- and 4-Digit Numbers*
Lesson 5: *Multiply 11 & 12*
Lesson 6: *Multiply and Divide with 11 & 12*
Lesson 7: *Multiplication & Division Relationships*
Lesson 8: *Use Multiplication Patterns*
Lesson 9: *Use Models to Multiply Tens and Ones*
Lesson 10: Model Division with Remainders
Lesson 11: Use Models to Divide Tens and Ones
Lesson 12: *Model Tenths & Hundredths*
Lesson 13: *Fractions Greater Than One*
Lesson 14: *Equivalent Fractions*
Lesson 15: *Equivalent Fractions on a Multiplication Table*
Lesson 16: *Same Size, Same Shape*
Lesson 17: *Change Customary Units of Length*
Lesson 18: *Change Metric Units of Length*
Lesson 19: *Estimate and Measure Liquid Volume*
Lesson 20: *Estimate and Measure Weight*

Optional:
Review Project: Horses in the Movies
Review Project: The Skateboard Designer
Review Project: Zoo Animal Habitats
Review Project: Games and Jewelry