



Essential Content Framework

A Beginning-of-Year Success Plan for Educators

Go Math! Grade 4

As schools enter the 2020-2021 academic year, educators will be challenged with meeting students' needs for the current calendar year while addressing learning gaps produced as a result of COVID-19 related school closures.

Working with the International Center for Leadership in Education (ICLE), HMH has identified the highest priority standards for you to focus on. These priority standards are built from hundreds of projects with thousands of educators around the country, which consistently show that prioritizing standards results in learning gains for ALL students, particularly students who are behind, and regardless of whether they have experienced disrupted learning.

Using these priority standards, HMH has developed this HMH Essential Content Framework as a guidance document as educators use the *Go Math!* planning resources and tools to guide their instruction beginning in Fall 2020.

The enclosed HMH Essential Content Framework allows educators to focus on those standards most critical to a student's success in achieving grade level proficiency and above, as well as providing specific content from the prior grade that can be used for scaffolding and reteaching.

Use this Essential Content Framework in conjunction with your school or district's scope and sequence documentation to identify critical skills, on-grade lessons, and expected prior-year learning that supports these standards.

Determining Student Needs

Understand the Options

Get to know what skill strengths and challenges your students are bringing to the classroom at the beginning of the year.

- Consult data or feedback from the last academic year. Reach out to the previous grade's teachers to find out whether there are any tips that you should consider as you start the year.
- As you begin each *Go Math!* chapter, use the **Show What You Know, Lesson Quick Check**, and related formative and summative assessments to diagnose your student's intervention levels.

- Then use the *Go Math!* RtI resources or refer to this Essential Content Framework for prior year lessons and resources you might assign to your students for remediation.

Vocabulary Builder

Complete the word association tree by using the number words with a ., Write the missing numbers.

Place Value

hundreds tens ones

1 2 3

4 5 6

7 8 9

Understand Vocabulary

Complete the sentences by using the number words with a .

- The **word form** of a number is a way to write a number by using words.
- The **expanded form** of a number is a way to write a number by showing the sum of the values of the digits.
- The **standard form** of a number is a way to write a number by using the digits 0 to 9, with each digit having a place value.
- Even** numbers have a 0, 2, 4, 6, or 8 in the ones place.
- Odd** numbers have a 1, 3, 5, 7, or 9 in the ones place.

Intervention Options

Use Show What You Know, Lesson Quick Check, and Assessments to diagnose students' intervention levels.

TIER 1	TIER 2	TIER 3	ENRICHMENT
On-Level Intervention For students who are generally at grade level but need early intervention with the lesson concepts, use: Tier 1 Activity for every lesson Star to Success Math	Strategic Intervention For students who need small group instruction to review concepts and skills needed for the chapter, use: Tier 2 Activity for every lesson Strategic Intervention Guide Star to Success Math	Intensive Intervention For students needing one-on-one instruction to build foundational skills for the chapter, use: Intensive Intervention Guide Star to Success Math	Independent Activities For students who successfully complete lessons, use: Differentiated Centers Kit Enrichment Activity for every lesson Enrich Book Math Mega Math

- As assignments are completed, use the Quick Reports to view progress toward standards by clicking the "Class Program" tab.

THINK Learning Class Progress Page

Class: 4th Grade

Teacher: [Name]

Progress and Reports

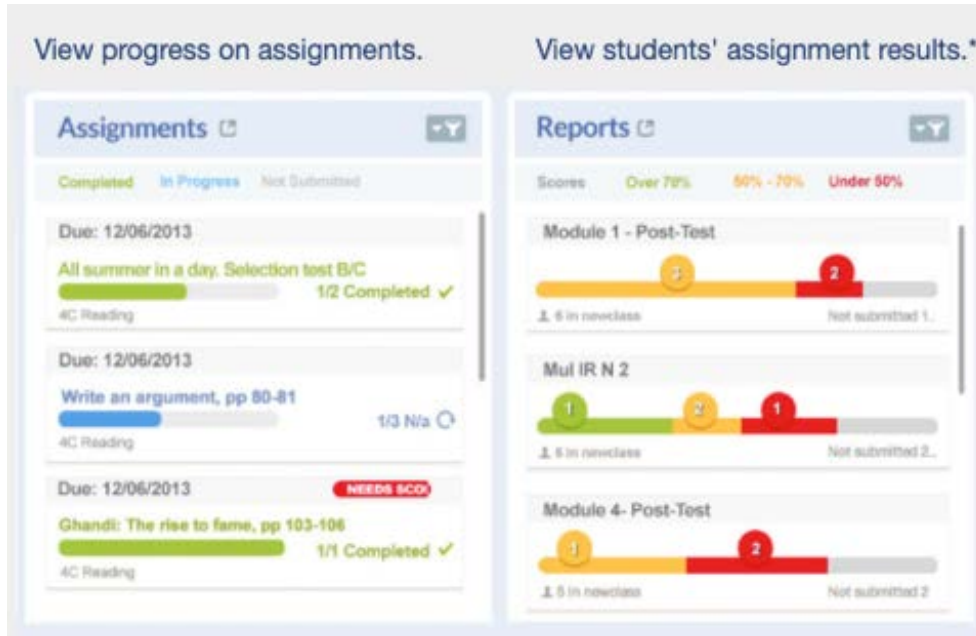
Class Progress: 77%

Class Standards Progress

Standard	Progress
4.NF.A.1	100%
4.NF.A.2	100%
4.NF.A.3	100%
4.NF.B.1	100%
4.NF.B.2	100%
4.NF.B.3	100%
4.NF.C.1	100%
4.NF.C.2	100%
4.NF.C.3	100%
4.NF.D.1	100%
4.NF.D.2	100%
4.NF.D.3	100%
4.NF.D.4	100%
4.NF.D.5	100%
4.NF.D.6	100%
4.NF.D.7	100%
4.NF.D.8	100%
4.NF.D.9	100%
4.NF.D.10	100%
4.NF.D.11	100%
4.NF.D.12	100%
4.NF.D.13	100%
4.NF.D.14	100%
4.NF.D.15	100%
4.NF.D.16	100%
4.NF.D.17	100%
4.NF.D.18	100%
4.NF.D.19	100%
4.NF.D.20	100%
4.NF.D.21	100%
4.NF.D.22	100%
4.NF.D.23	100%
4.NF.D.24	100%
4.NF.D.25	100%
4.NF.D.26	100%
4.NF.D.27	100%
4.NF.D.28	100%
4.NF.D.29	100%
4.NF.D.30	100%
4.NF.D.31	100%
4.NF.D.32	100%
4.NF.D.33	100%
4.NF.D.34	100%
4.NF.D.35	100%
4.NF.D.36	100%
4.NF.D.37	100%
4.NF.D.38	100%
4.NF.D.39	100%
4.NF.D.40	100%
4.NF.D.41	100%
4.NF.D.42	100%
4.NF.D.43	100%
4.NF.D.44	100%
4.NF.D.45	100%
4.NF.D.46	100%
4.NF.D.47	100%
4.NF.D.48	100%
4.NF.D.49	100%
4.NF.D.50	100%

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- Explore other Assignment and Assessment Reports in Go Math for insight into students' progress on assignments and their results.



- Learn to look for patterns. After students have completed an assessment, review the reports available for the class and individual students.

Review Priority Skills and Standards

Organized in a way to supplement the *Go Math!* Planning Guide, this Essential Content Framework is intended to provide instructional plans and access to lessons and interventions that will allow for students' learning gaps to be addressed throughout the school year.

- Identify the on grade-level lessons aligned with the HMH Priority Standards and, based on what you know about your class assessment reports, choose those prior-year lessons most appropriate for the majority of students in your class.
- Prior to beginning a chapter, use the on-grade chapter's **Show What You Know, Lesson Quick Check exercises**, and assessments to identify any learning gaps among the students. You can then use the prior-year lessons online to address these learning gaps.
- Based on your findings, you can also use the differentiated instruction resources in the Chapter Resources, Prerequisite Skills activities in the Teacher Edition, and RtI Intervention Options for each chapter to meet additional students' needs.
- During a lesson, use the Formative Assessment options from each lesson to determine the student's current success with the lesson's learning objective.

**Using this Essential Content Framework**

The Essential Content Framework that follows is for grade 4 *Go Math!* and covers those HMH Priority Standards identified for grade 4. Each HMH Priority Standard is followed by the lessons within the *Go Math!* Chapters that address that priority standard.

For each on-grade HMH Priority Standard, the prior learning lessons are also listed, allowing you to identify *Go Math!* resources you can use to prepare students for the on-grade level lessons.

Chapters 5 and 11 of grade 4 *Go Math!* do not cover an HMH Priority Standard. You should consider your own school's or district's scope and sequence for grade 4 to decide when to teach these chapters.

Grade 4 Priority Standards and Prerequisite Learning Lessons

Grade-Level Priority Standard	Current Grade 4 Lessons	Prior Learning Lessons
Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	Lessons 2.9, 2.12, 3.7, 4.3	Grade 3 Lessons 1.12, 3.4, 4.10, 6.4, 7.10, 7.11
Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.	Lessons 1.2, 1.3	Grade 3 Lesson 1.1, 1.2, 1.8

Grade-Level Priority Standard	Current Grade 4 Lessons	Prior Learning Lessons
Fluently add and subtract multi-digit whole numbers using the standard algorithm.	Lessons 1.6, 1.7, 1.8	Grade 3 Lesson 1.4, 1.5, 1.6, 1.7, 1.9, 1.10, 1.11
Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	Lessons 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.10, 2.11, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6	Grade 3 Lesson 3.3, 3.5, 3.6 3.7, 4.1, 4.2, 4.3, 4.4, 4.6, 6.1, 6.5, 6.6, 6.9
Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	Lessons 4.1, 4.2, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11	Grade 3 Lessons 3.4, 6.2, 6.3, 6.4, 6.7, 7.10, 7.11
Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.	Lessons 6.6, 6.7, 6.8	Grade 3 Lessons 9.1, 9.2, 9.3, 9.4, 9.5
Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.	Lessons 7.3, 7.4, 7.5, 7.10	Grade 3 Lesson 8.1, 8.2, 8.3, 8.4, 8.7, 8.8, 8.9

Grade-Level Priority Standard	Current Grade 4 Lessons	Prior Learning Lessons
<p>Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat $\frac{3}{8}$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?</p>	<p>Lessons 8.4, 8.5</p>	<p>Grade 3 Lessons 3.4, 4.10, 7.10, 7.11, 8.1, 8.2, 8.3, 8.4, 8.7, 8.8, 8.9</p>
<p>Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.</p>	<p>Lesson 9.7</p>	<p>Grade 3 Lessons 9.1, 9.2, 9.3, 9.4, 9.5, 9.6</p>
<p>Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.</p>	<p>Lessons 13.1, 13.2, 13.3, 13.4, 13.5</p>	<p>Grade 3 Lessons 11.6, 11.8</p>
<p>Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.</p>	<p>Lesson 12.5</p>	<p>Grade 3 Lessons 2.7, 10.6, 10.7, 10.8, 10.9</p>



Grade-Level Priority Standard	Current Grade 4 Lessons	Prior Learning Lessons
Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.	Lessons 10.5, 10.6	Lessons 12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 12.8

Use the following links to access prior learning lessons:

[Grade 3 Student Edition](#)

[Grade 3 Teacher Edition](#)

If you are unable to access content from other grade levels on ThinkCentral, click My Account. If additional grade levels do not appear as a clickable option, contact your district's ThinkCentral Administrator. Rostering help is available on the [HMH Back to School Support](#) site.

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