



Essential Content Framework

A Beginning-of-Year Success Plan for Educators

Go Math! Grade 5

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 assessment to diagnose your student's intervention levels.

- o 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

Have students complete the activities on this page by working alone or with partners.

Visualize It
A word association tree shows relationships between words. Each term in the tree relates to place value. Students should use the numbers provided to identify the hundreds, tens, and ones columns.

Understand Vocabulary
introduce the new words for the chapter.

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

Intervention Options **RtI** **Response to Intervention**

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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Intensive Intervention Guide • Star to Success Math 	Independent Activities For students who successfully complete lessons, use: <ul style="list-style-type: none"> • Differentiated Centers Kit • Enrich Activity for every lesson • Enrich Book • 1000 Mega Math

Place Value 4

- 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: 5th Grade

Class Progress

77%

Class Progress Legend:

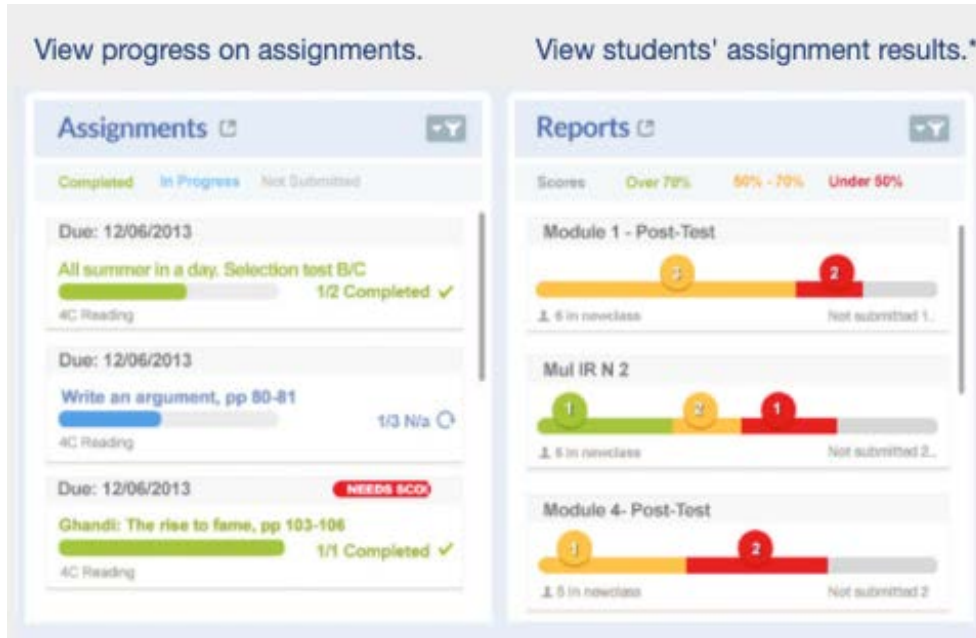
- 100% (Green)
- 90% (Yellow)
- 80% (Orange)
- 70% (Red)
- 60% (Dark Red)
- 50% (Black)
- 40% (Grey)
- 30% (Light Grey)
- 20% (White)
- 10% (Lightest Grey)
- 0% (White)

Class Progress Legend:

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- 30% (Light Grey)
- 20% (White)
- 10% (Lightest Grey)
- 0% (White)

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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 5 *Go Math!* and covers those HMH Priority Standards identified for grade 5. 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.

Chapter 10 of grade 5 *Go Math!* does not cover an HMH Priority Standard. You should consider your own school's or district's scope and sequence for grade 5 to decide when to teach this chapter.

Grade 5 Priority Standards and Prerequisite Learning Lessons

Grade-Level Priority Standard	Current Grade 5 Lessons	Prior Learning Lessons
Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. <i>For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.</i>	Lessons 9.5, 9.6, 9.7	Grade 4 Lesson 5.6, 10.7, 12.5
Fluently multiply multi-digit whole numbers using the standard algorithm.	Lessons 1.6, 1.7	Grade 4 Lessons 2.3, 2.5, 2.6, 2.7, 2.10, 2.11, 3.1, 3.3, 3.4, 3.5, 3.6



Grade-Level Priority Standard	Current Grade 5 Lessons	Prior Learning Lessons
Find whole-number quotients of whole numbers with up to four-digit dividends and two-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 1.8, 1.9, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.8, 2.9	Grade 4 Lessons 4.1, 4.2, 4.4, 4.5, 4.6, 4.8, 4.9, 4.10, 4.11
Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	Lessons 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8	Grade 4 Lessons 1.6, 1.7, 2.6, 2.7, 2.10, 2.11, 3.7, 4.8, 4.9, 4.10, 4.11
Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.	Lessons 6.1, 6.2, 6.3, 6.9	Grade 4 Lessons 7.3, 7.4, 7.5, 7.7, 7.8, 7.9, 7.10

Grade-Level Priority Standard	Current Grade 5 Lessons	Prior Learning Lessons
<p>Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.</p>	<p>Lessons 7.4, 7.7, 7.10</p>	<p>Grade 4 Lessons 8.2, 8.3, 8.4, 8.5</p>
<p>Interpret multiplication as scaling (resizing), by: explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1.</p>	<p>Lessons 7.5, 7.6, 7.8</p>	<p>Grade 4 Lessons 8.2, 8.3, 8.4, 8.5</p>
<p>Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</p>	<p>Lessons 7.9, 7.10</p>	<p>Grade 4 Lessons 8.2, 8.3, 8.4, 8.5</p>
<p>Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $1/3$-cup servings are in 2 cups of raisins?</p>	<p>Lesson 8.4</p>	<p>Grade 4 Lessons 8.4, 8.5</p>



Grade-Level Priority Standard	Current Grade 5 Lessons	Prior Learning Lessons
Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.	Lessons 11.8, 11.9, 11.10	Grade 4 Lessons 13.1, 13.2, 13.3, 13.4, 13.5
Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.	Lessons 9.3, 9.4	Grade 4 Lessons 5.6, 10.7, 12.5

Use the following links to access prior learning lessons:

[Grade 4 Student Edition](#)

[Grade 4 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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