



# Essential Content Framework

## A Beginning-of-Year Success Plan for Educators

### *Go Math!* Grade 6

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

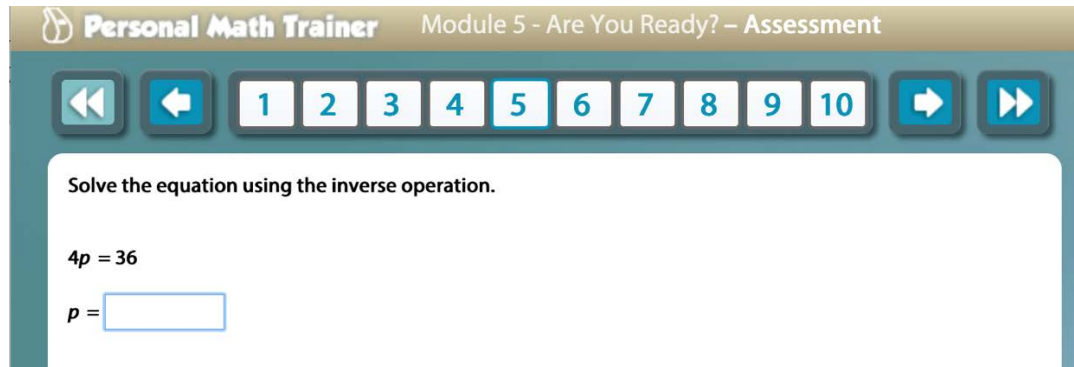
Get to know what skill strengths and challenges your students are bringing to the classroom at the beginning of the year.

- 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.
- The *Assessment Resources* ancillary for Grade 6 includes a Placement Test that is correlated to Grade 5 standards and allows you to create an Individual Student Profile showing what students know at the start of the school year.
- As you begin each module in Grade 6, use the **Are You Ready?** quiz to diagnose students’ preparedness for the module. The quiz focuses on prerequisite skills for the module, and students who need help with those skills can get it through the *Differentiated Instruction* ancillary, which includes Differentiated interventions.

| ARE YOU READY? <i>Diagnostic Assessment</i>  |                     |   |  |
|--|---------------------|---|--|
| Use to determine if students need intervention for the module’s prerequisite skills. |                     |   |  |
| Skill  | Missed More Than... | Intervene With Skills<br><i>Intervention worksheets</i><br>(available online) | For Enrichment<br><i>Differentiated Instruction</i><br>(available in print and online) |
| Compare Whole Numbers  | 1 question          | <b>Skill 4</b> Compare Whole Numbers  | <b>Module 1 Challenge</b> Extend-the-Math Lesson Activities in TE                      |
| Order Whole Numbers  | 1 question          | <b>Skill 5</b> Order Whole Numbers  | <b>Module 1 Challenge</b> Extend-the-Math Lesson Activities in TE                      |
| Locate Numbers on a Number Line  | 1 question          | <b>Skill 61</b> Locate Numbers on a Number Line                               | <b>Module 1 Challenge</b> Extend-the-Math Lesson Activities in TE                      |



- You can use the Personal Math Trainer on my.hrw.com to administer the **Are You Ready?** quizzes and other assessments.



- Throughout the course, you can use the Personal Math Trainer to give homework assignments that include learning aids such as feedback, worked-out examples, step-by-step interactive solutions, access to a PDF of the textbook, and Math on the Spot videos.
- Special types of homework assignments available with the Personal Math Trainer provide personalized intervention that is delivered either before or after the assignments.

**Please choose an assignment type:**


Category:  Daily Intervention  
 Standard-Based Intervention

Grade:  Course Intervention  
 Tests and Quizzes  
 Homework

Show c

- When students use the Personal Math Trainer, you can generate a variety of reports of student performance.



 Houghton Mifflin Harcourt Holt McDougal Online

[WELCOME](#) | [ASSIGNMENTS](#) | [CALENDAR](#) | [REPORTS](#) | [PREFERENCES](#)

Please choose a Class and a Book:

Class:

Book:

### Reports

**Class Comprehensive Overview:**

View results for cumulative information.

**Class Progress Report:**

View results for Tests and Quizzes, Homework and Teacher Created Assignments posted on Holt McDougal Online. Drill down from the Class Progress Report to see details for individual Students or individual assignments.

**Quick Reports:**

View a quick overview of class results for assignments and against standards progress. Drill down to see performance by a class on an individual assignment or by an individual student across multiple assignments.

**Knewton Analytics Report**

View Knewton analytics report for this class.

**Daily Intervention:**

View results for online Daily Intervention assignments based on textbook objectives. Drill down from the Class Intervention Report to see details for individual assignments or individual students.

**Standards:**

View test and quiz results correlated to state or national standards.

**Course Intervention:**

View results for online Intervention assignments based on textbook objectives. Drill down from the Class Intervention Report to see details for individual assignments or individual students.



### **Review Priority Skills and Standards**

Organized in a way to supplement the *Go Math!* Planning and Pacing Guides, this Essential Content Framework is intended to provide instructional plans and access to 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 module, use the on-grade lesson's **Show what you know, Lesson Quick Check**, and assessments to identify any learning gaps among the students, then use resources from the prior-year lessons online and in your teacher materials to address these learning gaps.
- Based on your findings, use the Differentiated Instruction, Prerequisite Skills activities, and RtI Intervention Options for each module to meet the 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.
- lesson's learning objective.

### **Using this Essential Content Framework**

The Essential Content Framework that follows is for Grade 6 *Go Math!* and covers those HMH Priority Standards identified for Grade 6. Each HMH Priority Standard is followed by the lessons within the *Go Math!* modules 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.

Modules 2, 3, 8, and 9 of Grade 6 *Go Math!* do not cover an HMH Priority Standard. You should consider your own school's or district's scope and sequence to decide when to teach these modules.



## Grade 6 Priority Standards and Prerequisite Learning Lessons

| Grade-Level Priority Standard | Priority Standards Text   | Current Grade 6 Lessons | Prior Learning Lessons   |
|-------------------------------|---|-------------------------|--|
| 6.EE.2c                       | Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$ . | 10.2                    | Grade 3 Lessons 11.4, 11.5, 11.6, 11.8, 11.9, 11.10<br><br>Grade 4 Lessons 10.2, 10.3, 10.4<br><br>Grade 5 Lessons 1.10, 1.11, 1.12, 11.5, 11.6, 11.11 |
| 6.EE.3                        | Apply the properties of operations to generate equivalent expressions. For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$ ; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$ ; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$ .  | 10.3                    | Grade 5 Lessons 1.10, 1.11, 1.12   |
| 6.EE.4                        | Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number $y$ stands for.  | 10.1, 10.3              | Grade 5 Lessons 1.10, 1.11, 1.12   |



| Grade-Level Priority Standard | Priority Standards Text   | Current Grade 6 Lessons | Prior Learning Lessons  |
|-------------------------------|---|-------------------------|---|
| 6.EE.9                        | Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time. | 11.1, 12.2, 12.3, 12.4  | Grade 4 Lessons 2.1, 2.2<br><br>Grade 5 Lessons 9.2, 9.3, 9.4                               |
| 6.G.1                         | Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.   | 13.1, 13.2, 13.3, 13.4  | Grade 3 Lessons 11.4, 11.5, 11.6, 11.8, 11.9, 11.10<br><br>Grade 4 Lessons 10.2, 10.3, 10.4 |



| Grade-Level Priority Standard | Priority Standards Text   | Current Grade 6 Lessons | Prior Learning Lessons   |
|-------------------------------|---|-------------------------|--|
| 6.G.2                         | Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.  | 15.2, 15.3              | Grade 5 Lessons 11.5, 11.6, 11.8, 11.9                                       |
| 6.G.4                         | Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.  | 15.1                    | Grade 4 Lessons 13.2, 13.3<br>Grade 5 Lessons 7.7, 11.4                      |
| 6.NS.1                        | Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$ . (In general, $(a/b) \div (c/d) = ad/bc$ .) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$ -cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi? | 4.2, 4.3, 4.4           | Grade 4 Lesson 5.4<br>Grade 5 Lessons 6.5, 6.6, 7.2, 7.3, 7.4, 7.6, 8.1, 8.4 |





| Grade-Level Priority Standard | Priority Standards Text  | Current Grade 6 Lessons | Prior Learning Lessons   |
|-------------------------------|--|-------------------------|--|
| 6.NS.3                        | Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.   | 5.2, 5.3, 5.4, 5.5      | Grade 5 Lessons 1.7, 2.6, 3.8, 3.9, 4.7, 5.6                     |
| 6.NS.5                        | Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation. | 1.1                     | Grade 4 Lesson 1.3<br>Grade 5 Lesson 3.3                         |
| 6.NS.8                        | Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.  | 12.1, 14.1              | Grade 5 Lessons 9.2, 9.3, 11.1, 11.2, 11.3<br>Grade 6 Lesson 1.3 |
| 6.RP.3b                       | Solve unit rate problems including those involving unit pricing and constant speed. For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?   | 6.2, 6.3, 7.1           | Grade 4 Lessons 6.1, 6.2, 6.3<br>Grade 5 Lesson 9.5, 9.7         |
| 6.RP.3c                       | Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.  | 8.1, 8.3                | Grade 4 Lessons 9.1, 9.2, 9.3, 9.4                               |



| Grade-Level Priority Standard | Priority Standards Text  | Current Grade 6 Lessons | Prior Learning Lessons                    |
|-------------------------------|--|-------------------------|---|
| 6.SP.5.a                      | Summarize numerical data sets in relation to their context, such as by reporting the number of observations.   | 16.1                    | Grade 4 Lesson 12.5<br>Grade 5 Lesson 9.1 |
| 6.SP.5.b                      | Summarize numerical data sets in relation to their context, such as by describing the nature of the attribute under investigation, including how it was measured and its units of measurement.   | 16.1                    | Grade 4 Lesson 12.5<br>Grade 5 Lesson 9.1 |
| 6.SP.5.c                      | Summarize numerical data sets in relation to their context, such as by giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. | 16.1, 16.2              | Grade 6 Lessons 14.2, 14.3, 15.1, 15.2    |
| 6.SP.5.d                      | Summarize numerical data sets in relation to their context, such as by relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.  | 16.1, 16.2              | Grade 4 Lesson 12.5                       |