

# 9

## Assessment in *Everyday Mathematics*

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## 9.1 Introduction

Assessment in *Everyday Mathematic* provides a detailed record of growth while also giving teachers timely feedback about the needs of individual students. Assessment opportunities and tools document the development of each child's mathematical understanding and skills over time and provide guidance for instructional support based on expectations for mastery of the content standards for each grade.

### 9.1.1 Principles of Assessment in *Everyday Mathematics*

The development of this edition of *Everyday Mathematics* included a study of current research on assessment, information-gathering sessions with district leaders and teachers, and a review of published information from the national assessment consortia, PARCC and SBAC. The authors used this new information to develop an assessment system based on the principles listed below.

Assessment in *Everyday Mathematics*:

- addresses the full range of content and practices in the Common Core State Standards (CCSS);
- consists of tasks that are worthwhile learning experiences;

- is manageable for teachers;
- informs instruction by providing actionable information about students' progress;
- provides information for grading;
- clarifies the *Everyday Mathematics* spiral and helps teachers decide when to intervene and when “watchful waiting” is appropriate;
- serves basic Tier 1 and Tier 2 Response to Intervention (RtI) screening and progress monitoring functions; and
- provides information that will complement data from external standards-based assessments, including those from PARCC and SBAC. Although the assessments in *Everyday Mathematics* are designed to complement external assessments, the curriculum-embedded assessments are not designed to serve many functions of high-stakes assessments, such as program evaluation and teacher accountability.

### 9.1.2 Purposes of Assessment in *Everyday Mathematics*

Assessment in this edition of *Everyday Mathematics* serves two main functions: to support learning and to measure achievement. Each purpose is integral to a successful assessment plan.

**Formative assessment** supports learning by providing information about students' current knowledge and abilities so teachers can plan instruction more effectively. It encourages teachers and students to identify areas of weakness or strength so they can focus their efforts more precisely. Formative assessment occurs when student thinking is examined and the student receives feedback and instruction that moves learning forward. Formative assessment is not an instrument or a fixed set of assessments. Instead it is a process that takes place as teachers and students interact in real time in the classroom and as teachers examine student work outside the classroom.

**Summative assessment** measures student growth and achievement. A summative assessment might be designed, for example, to determine whether students have learned certain material by the end of a given period of study.

Assessment opportunities, tools, and techniques often serve more than one purpose in *Everyday Mathematics*. For example, each regular lesson and Open Response and Reengagement lesson includes a daily assessment opportunity (an Assessment Check-In) that provides information on student expectations for the lesson's focus content and suggestions for follow-up instruction based on student performance. When teachers use the information to address students' needs and plan instruction, the purpose is formative. When teachers use the results for grades and progress reports, the purpose is summative. Ideally, teachers will regularly gather and use information for both purposes to help them achieve a balanced approach to assessment that meets their needs.

For more information, see Section 9.3 *Assessment Opportunities*.

For more information, see Section 9.4 *Assessment Tools*.

## 9.2 Assessment of Content and Practices

*Everyday Mathematics* integrates instruction and assessment of mathematical practices with instruction and assessment of grade-level content. The mathematical practices are not to be separated from the content; they are mathematical habits of mind students should develop as they learn mathematical content.


However, the content and practice standards in the CCSS differ from each other in important respects. The content standards describe specific goals that are organized by mathematical domain and differ from grade to grade. The practice standards describe general, cross-grade goals that are related to processes such as problem solving, reasoning, and modeling. Assessing whether a student has mastered specific skills or understandings is different from assessing whether that student is progressing in proficiency with mathematical practices such as problem solving or reasoning. Many tasks in *Everyday Mathematics* provide opportunities to assess both content and practice standards. However, due to the differing nature of these standards, *Everyday Mathematics* assesses and tracks progress on them in different ways.

For information on the digital Evaluation Tool, see Section 9.4.3. *Digital Assessment and Reporting Tools.*

### 9.2.1 Assessing the Content Standards

Each grade's Common Core content standards are unpacked into 45 to 80 *Everyday Mathematics* Goals for Mathematical Content (GMC). The standards and the corresponding GMCs are listed in the back of each grade's *Teacher's Lesson Guide* and in the Teacher Center.

For information on the CCSS content standards and *Everyday Mathematics* GMCs, see Section 1.1.5 *Unpacking the Content Standards.*

Common Core State Standards 	
Standards for Mathematical Content	
Domain	<i>Everyday Mathematics</i> Goals for Mathematical Content
Operations and Algebraic Thinking 2.OA	
<b>Cluster</b> Represent and solve problems involving addition and subtraction.	
<p><b>2.OA.1</b> Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</p>	<p><b>GMC</b> Model 1-step problems involving addition and subtraction.</p> <p><b>GMC</b> Use addition and subtraction to solve 1-step number stories.</p> <p><b>GMC</b> Model 2-step problems involving addition and subtraction.</p> <p><b>GMC</b> Use addition and subtraction to solve 2-step number stories.</p>

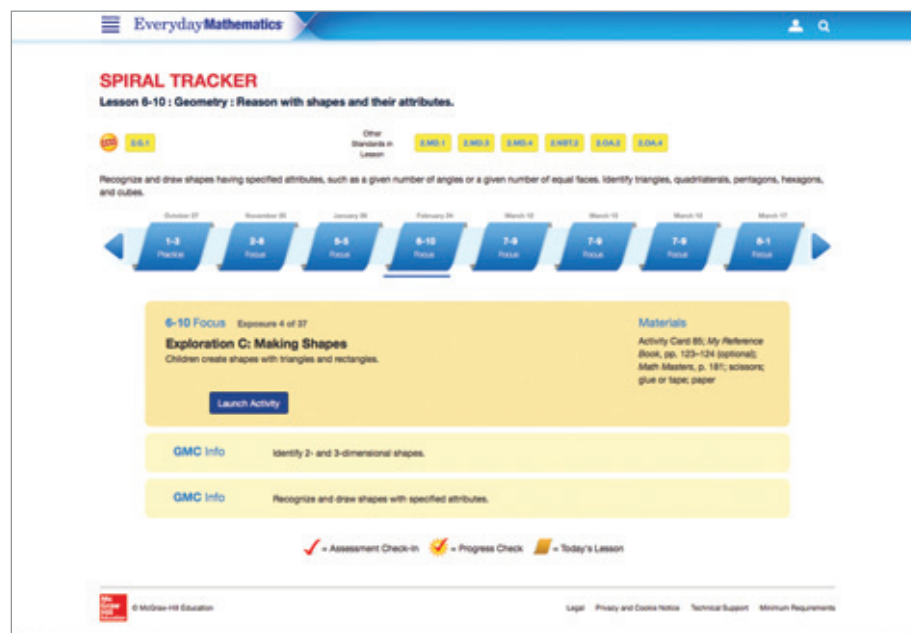
↑  
the first standard under this Domain

↑  
program goals for finer-grained tracking of student progress.

Excerpt from the table listing the Common Core State Standards and corresponding GMCs, Grade 2 *Teacher's Lesson Guide*

For more information on the Spiral Tracker, see Section 2.2.1 *The Spiral: How Everyday Mathematics Distributes Learning*.

The online Spiral Tracker provides detailed information about learning trajectories leading to mastery of the content standards. For each standard, the Tracker displays most related activities and assessments and the GMCs that each task focuses on. Information from the Spiral Tracker can be useful for detailed assessment of student learning and for planning differentiation. Go to [connectED.mcgraw-hill.com](http://connectED.mcgraw-hill.com) to access the Spiral Tracker.



Spiral Tracker for Grade 2, Lesson 6-10 available through the Standards button on the Overview page

For more information, see Section 9.3 *Assessment Opportunities*.

For more information, see Section 9.4 *Assessment Tools*.

For more information on the Standards for Mathematical Practice and *Everyday Mathematics* GMPs, see Section 1.2 *Standards for Mathematical Practice*.

Most assessment opportunities in the program are clearly tagged with one or more content standards. Within the online assessment and reporting system, these opportunities are also linked to the finer-grained GMCs, allowing for detailed tracking of student performance on standards and curriculum goals. Each task that assesses a content standard embeds information about reasonable expectations for that standard at that point in the year. Individual Profiles of Progress, Class Checklists, and the digital assessment and reporting tools help teachers monitor students' progress and target differentiation.

### 9.2.2 Assessing the Practice Standards

Since the Standards for Mathematical Practice in the CCSS are broadly written for Grades K to 12, *Everyday Mathematics* includes specific Goals for Mathematical Practice that unpack the Standards for Mathematical Practice (SMP) for elementary school teachers and students. These *Everyday Mathematics* Goals for Mathematical Practice (GMP) can be useful for assessing the mathematical practices because they highlight key aspects of each practice.

Tracking and evaluating progress on the mathematical practices requires a more qualitative approach. Assessment opportunities for the practices include writing/reasoning prompts, open response problems, Assessment Check-Ins, Progress Check lessons, and observations of students in the course of daily work. Tools for assessing and tracking progress on the practices include checklists and task-specific rubrics for open response problems.

## 9.3 Assessment Opportunities

*Everyday Mathematics* offers many opportunities for assessment of content and practices. Certain of these opportunities have been designated as *formal* assessments. Formal assessments include Assessment Check-Ins, which are embedded in most lessons; two-day Progress Check lessons at the end of each unit; and Interim Assessments at the middle and end of each grade. Formal assessments are indicated by a red checkmark in both digital and print teacher materials. The formal assessments embedded in *Everyday Mathematics* provide balanced and comprehensive information for informing instruction and assigning grades—they are all “fair to grade”.

In addition to the identified formal assessments, almost any task in *Everyday Mathematics* can serve as an *informal* assessment opportunity. For example, Math Boxes, including those with Writing/Reasoning prompts, can be useful in assessing student proficiency. Other tasks, such as Mental Math and Fluency exercises and journal problems, may also be useful for tracking student learning at a detailed level. The Spiral Tracker can help teachers identify tasks and activities related to a standard of interest for informal assessment.

Data from both formal and informal assessment opportunities can be collected and analyzed using the online assessment tools. In order to preserve the integrity of the program’s system of formal assessments, the digital reporting system provides separate reports for formal and informal assessments.

Since mastery in a spiral curriculum develops over time, the program provides information about expectations for mastery throughout each grade. Such information, combined with information about how much instruction and practice remains for each standard, helps teachers decide whether intervention or “watchful waiting” is more appropriate for students who are struggling. If, for example, a student is struggling with a standard that has only recently been introduced, it may be appropriate to watch and wait rather than intervene immediately. If, on the other hand, a student is struggling with a standard that is almost complete, intervention may be more appropriate.

The information below is organized into three subsections.

- Section 9.3.1 discusses ongoing, lesson-embedded opportunities.
- Section 9.3.2 discusses Progress Check lessons in Grades 1 through 6.
- Section 9.3.3 discusses Interim Assessments, including Beginning-of-Year assessments

### 9.3.1 Assessment Opportunities within Lessons

**Assessment Check-Ins** GRADE LEVEL **K** 1 2 3 4 5 6

**Where:** Within the Focus section of the lesson

**Frequency:** Every regular and Open Response and Reengagement lesson

**Formal:** Yes



Assessment is indicated with a red check

For information on tracking and recording tools, see Section 9.4 *Assessment Tools*.

For more information, see Section 2.2 *Design of Everyday Mathematics*.

For more information, see Section 9.4.3 *Digital Assessment and Reporting Tools*.

**Primary Purpose:** Assessment Check-Ins are lesson-embedded opportunities to assess the focus content and practices of the lesson. They address the main content in each lesson, provide specific information on mastery expectations, and offer follow-up suggestions based on students' performance.

All Assessment Check-Ins describe expectations for that point in the curriculum for up to three content or practice standards. They clarify whether students are not yet expected to have mastered the content or are expected to have partially mastered it at that time. Assessment Check-Ins offer ideas for assisting students who struggle (and sometimes for those who excel). The Assessment Check-In may describe a particular activity to support individual students, point to an Adjusting the Activity note, or suggest the use of a differentiation option or game.

**Assessment Check-In** CCSS K.CC.4b

Note whether children appear to identify the quantities without counting every dot and whether they recognize that dots in different arrangements can represent the same quantity. Expect most children to identify at least the smallest quantities (1, 2, and 3) quickly and correctly (subitizing). Many children may attempt to count larger sets during this first exposure to Quick Looks, but as they gain experience and as the numbers get larger, they will begin to look for groups and patterns to help them find the totals. **GMP2.2**

Assessment and Reporting [Go Online](#) to record student progress and to see trajectories toward mastery for these standards.

Assessment Check-In, Kindergarten Lesson 1-10 from the *Teacher's Lesson Guide*

EverydayMathematics

Unit 1 Lesson 1-4

Area of a Rectangle, Part 2

**Warm Up**  
Mental Math and Fluency  
Students add mixed numbers.

**Focus**  
Math Message  
Students determine how many squares with a side length of  $\frac{1}{2}$  foot fit in 1 square foot.

**Focus**  
Discussing Tiling Patterns  
Students find and justify a pattern about how many squares with fractional side lengths fit in 1 square foot.

**Focus**  
Using a Pattern to Find Area  
Students solve area problems involving tiling with squares with fractional side lengths.

**Focus**  
Summarize

**Practice**  
Math Boxes 1-4  
Students practice and maintain skills.

**Practice**  
Home Link 1-4  
Homework: Students divide a square mile into squares with fractional side lengths.

**Readiness**  
Tiling with Squares with...

**Enrichment**  
Showing Area Unit Conversions

The Assessment Check-In, Grade 5 Lesson 1-4, is accessible through the Activities view in the Teacher Center

**Open Response and Reengagement lessons** contain Assessment Check-Ins that focus on expectations for the content standard(s) addressed in the problem and point teachers to a task-specific rubric to assess student work on a target Goal for Mathematical Practice. Each Open Response and Reengagement lesson includes evaluated student work samples to help teachers understand how to evaluate their own students' work.

For more information on assessing the practice standards in Open Response and Reengagement lessons, see Section 6.2.5 *Evaluating Student Performance*.

**Assessment Check-In** **CCSS 2.NBT.6**

Collect and review children's revised work. Expect children to improve their work based on the class discussion. For the content standard, expect most children to find that the sum of the four numbers is 95 using any strategy. You can use the rubric on page 626 to evaluate children's revised work for **GMP7.2**.

**Assessment and Reporting** **Go Online** to record student progress and to see trajectories toward mastery for these standards.

Assessment Check-In, Grade 2 Open Response and Reengagement Lesson 7-2

Goal for Mathematical Practice	Not Meeting Expectations	Partially Meeting Expectations	Meeting Expectations	Exceeding Expectations
<b>GMP7.2</b> Use structures to solve problems and answer questions.	Does not provide evidence of an addition strategy that is based on place value.	Provides evidence of an addition strategy that is based on place value but includes significant errors, such as confusing tens and ones.	Provides evidence of an accurate addition strategy that is based on place value or that involves strategically ordering the addends.	Meets expectations and shows a second strategy for adding the numbers.

Task-specific rubric, Grade 2 Open Response and Reengagement Lesson 7-2

For more information on using rubrics to assess the mathematical practices, see Section 9.4 *Assessment Tools*.

Each Section or Unit Organizer provides a list of Assessment Check-Ins with the standards each task assesses.

**Ongoing Assessment**

In addition to frequent informal opportunities for "kid watching," every lesson (except Explorations) offers an **Assessment Check-In** to gauge children's performance on one or more of the standards addressed in that lesson.

Lesson	Task Description	Common Core State Standards
5-1	Solve place-value riddles.	1.NBT.2, 1.NBT.2a, 1.NBT.2b, 1.NBT.2c
5-2	Identify digits in 2-digit numbers.	1.NBT.2
5-3	Make place-value exchanges.	1.NBT.2, 1.NBT.2a
5-4	Use relation symbols to compare 2-digit numbers.	1.NBT.3
5-5	Categorize number sentences as true or false.	1.OA.7
5-6	Fill a number scroll to at least 120.	1.NBT.1, 1.NBT.2, SMP6
5-7	Understand that length is the distance along a path.	1.MD.2
5-9	Use relation symbols to compare 1- and 2-digit numbers.	1.NBT.3
5-10	Solve a comparison number story.	1.OA.1
5-11	Use a strategy to add a 2-digit number and a 1-digit number.	1.NBT.4
5-12	Find the sum of a 1-digit and a 2-digit number.	1.NBT.4

Grade 1 Unit 5 Assessment Check-Ins from the Unit Organizer

For general information about Math Boxes, see Section 4.2.5 *Practice*. For information about using Math Boxes for differentiation, see Section 10.2.1 *Differentiation Features in Lessons*.

## Preview Math Boxes

GRADE LEVEL K 1 2 3 4 5 6

**Where:** In the Practice portion of some lessons

**Frequency:** One pair per unit near the end of each unit

**Formal:** No


**Primary Purpose:** In Grades 1–6, a set of paired Preview Math Boxes appear in each unit. Problems in paired Math Boxes pages appear in the same order and address the same content as one another, with subtle changes to the context or numbers. The Preview Math Boxes can be used to gauge students' readiness for the upcoming unit so that teachers can plan instruction and choose appropriate differentiation activities for individual students, for small groups, and for the whole class.

### Math Boxes: Preview for Unit 3

Lesson 2-14

DATE \_\_\_\_\_ TIME \_\_\_\_\_

**1** Match the letters to the fractions they represent on the number line.



$\frac{1}{2}$  =     b    

$\frac{1}{4}$  =     a    

$\frac{3}{5}$  =     c

**2** Ben has 3 cans of food to feed his cat for 5 days. Write an expression that shows how much of a can Ben should feed his cat each day.

$3 \div 5$ , or  $\frac{3}{5}$

**3** Katie and Jonah were sharing a bag of pretzels. Katie had  $\frac{1}{2}$  of the pretzels. Jonah had  $\frac{1}{3}$  of the pretzels. Who had more pretzels?

    Katie

**4** Write two fractions equivalent to  $\frac{1}{3}$ .

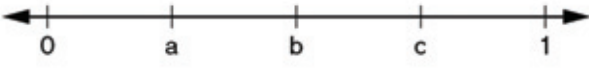
$\frac{3}{9}$       $\frac{25}{75}$

Write two fractions equivalent to  $\frac{1}{3}$ .

$\frac{8}{12}$       $\frac{50}{75}$

Math Boxes
Screen 1

**1** Match the letters to the fractions they represent on the number line.



$\frac{1}{2}$  =

$\frac{1}{4}$  =

$\frac{3}{5}$  =

In Grade 5, paired Preview Math Boxes for Unit 3 are in Lessons 2-10 and 2-14. Both are accessible in the print journal and in the Student Learning Center.



## Writing/Reasoning Prompts



GRADE LEVEL K 1 2 3 4 5 6

**Where:** Within regular Math Boxes

**Frequency:** In about half of the lessons

**Formal:** No

**Primary Purpose:** Many Math Boxes have writing/reasoning prompts that prompt students to communicate their understanding of concepts and skills and their strategies for solving problems. They help students extend and deepen their mathematical thinking. Writing/reasoning prompts provide valuable opportunities for assessing the Standards for Mathematical Practice.

5 **Writing/Reasoning** Look at Problem 1. How did you show 25 on the calculator without using the 5 key? Explain how you knew what to enter. Then explain why it works.

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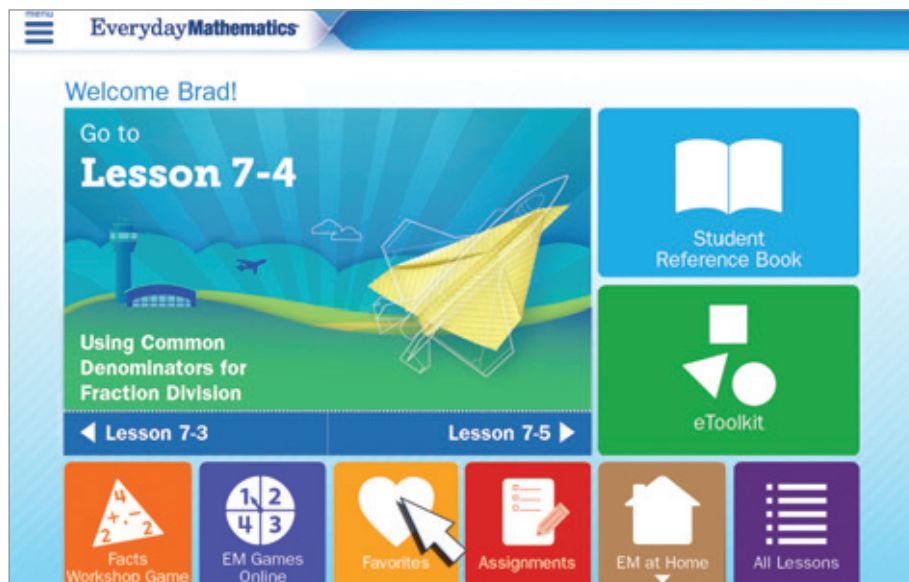
Writing/Reasoning Prompt, Grade 2 Lesson 2-10

## Other Lesson-Embedded Assessment

Almost any task in *Everyday Mathematics* can provide information that teachers may find useful for informal assessment. Assessment tools, including the print checklists and the online assessment and reporting system, can accommodate data from sources other than the formal assessments. Teachers should use their judgment about expanding the range of data they gather and how best to use the additional information to inform instruction and assign grades. For example, in assessing student learning, some teachers may find it helpful to gather data from Home Links or make observations while students play games, work on hands-on activities, or engage in partner discussions. Since every Math Boxes problem is tagged with specific standards, some teachers may find them particularly useful for assessment.

Many teachers create math portfolios by working with students to collect samples of their work throughout the year. Portfolios allow students and teachers to clearly see growth over time, to demonstrate progress to parents and other teachers, to capture individual interests and approaches, and to assess each student's learning. This permits teachers to take a broader view of their students' progress and may be particularly illuminating with respect to the mathematical practices, since students' collected work throughout the year will likely demonstrate growth in communication skills and new strategies students have learned to solve familiar and unfamiliar problems. Students who use the digital Student Learning Center have access to a "Favorites" button. Students can use this function to develop a digital portfolio by archiving their favorite work or work that a teacher directs them to save.

For information on using generic rubrics to assess the mathematical practices, see Section 9.4.1 *Rubrics for Evaluating Mathematical Practices*.



Grade 5 Student Learning Center, Favorite button

### 9.3.2 Progress Check Lessons

GRADE LEVEL  K  1  2  3  4  5  6

The last lesson in each unit in Grades 1 through 6 is a Progress Check. This two-day lesson serves as a periodic assessment. The items on the Progress Check are written at a level such that students who are meeting expectations for the standards being assessed should be able to solve them correctly. Except for the Self-Assessment and Challenge items, the assessments in the Progress Checks are appropriate for grading because they reflect mastery expectations for the standards they assess to that point in the grade.

Tables in the Progress Check Lesson Openers for Day 1 and Day 2 provide information on each item, including the content and practice standards addressed. An asterisk next to a Goal for Mathematical Content indicates that instruction and most practice is complete for that goal at this point in the curriculum. If student performance on these items is not satisfactory, then it may be particularly important to intervene.

Lesson  
**5-12**  
Assessment

**Unit 5 Progress Check**

**Overview** Day 1: Administer the Unit Assessments.  
Day 2: Administer the Open Response Assessment.

**2-Day Lesson**

Student Learning Center  
Students may take assessments digitally.

Assessment and Reporting  
Record results and track progress toward mastery.

**Day 1: Unit Assessments**

**1 Warm Up** 5-10 min **Materials**

**Self Assessment** Assessment Handbook, p. 31  
Children complete the Self Assessment.

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**2a Assess** 35-50 min

**Unit 5 Assessment** Assessment Handbook, pp. 32-33  
These items reflect mastery expectations to this point.

**Unit 5 Challenge (Optional)** Assessment Handbook, p. 34  
Children may demonstrate progress beyond expectations.

Common Core State Standards	Goals for Mathematical Content (GMC)	Lessons	Self Assessment	Unit 5 Assessment	Unit 5 Challenge
<b>2.OA.1</b>	Model 1-step problems involving addition and subtraction.	5-7 to 5-10	3	6-9	
	Use addition and subtraction to solve 1-step number stories.	5-7 to 5-10	3	6-9	
<b>2.OA.2</b>	Subtract within 20 fluently.*			1b	
	Add within 20 fluently.*	5-1, 5-9		1a, 1c	
<b>2.NBT.5</b>	Add within 100 fluently.	5-3, 5-6 to 5-11		5a, 5c, 7, 8	1
	Subtract within 100 fluently.	5-6, 5-10, 5-11		5b, 9	1
<b>2.NBT.7</b>	Subtract multidigit numbers using models or strategies.	5-3, 5-6, 5-10		9	1
	Add multidigit numbers using models or strategies.	5-3, 5-4, 5-6 to *		8-8	1, 2

Progress Check Lesson Opener Table, Grade 2, Lesson 5-12

### Self Assessment (Every unit)

Each Progress Check lesson includes this opportunity for students to consider how well they are doing on the focus content of the unit. Each Self Assessment encourages students to reflect on their progress with six different topics. Each topic includes a relevant example or problem from a journal page in the unit that encourages students to review their work from the unit as they complete the Self Assessment. This may be a useful review exercise for students the day before they take the Unit Assessment.

### Unit Assessment (Every unit)

Items on the Unit Assessment address the content and practices that were the focus of the unit. For each item in the Unit Assessment, modifications are provided in an Adjusting the Assessment table. Modifications to scaffold items may suggest providing students a tool (such as a number line or counters), providing strategic hints, or administering the item or response in a different format. Modifications to extend items provide extra challenge related to the problem.

### Challenge (Every unit)

Each Progress Check lesson includes one or more optional challenge problems related to important ideas from the unit. Since these problems exceed expectations for that point in the year, they are not “fair to grade”. However, data gathered from implementing the Challenge items may be used to inform instruction.

For an example of an Adjusting the Assessment table, see Section 10.3.2 *Effective Differentiation Begins with Good Assessment Practices*.

## Open Response Assessment (Odd-numbered units)

Open response problems in the Progress Check lessons offer opportunities for students to think creatively about a problem. They address one or more content standard and one Goal for Mathematical Practice that can be evaluated using a task-specific rubric. Discussion questions and suggestions for sharing problem-solving strategies are provided to help teachers facilitate a brief discussion after students have completed the problem. The task-specific rubric is accompanied by student work samples to help teachers evaluate their own students' work.

**Evaluating Children's Responses** **2.NBT.1**

Collect children's work and review any of your notes about children's performance. For the content standard, expect most children to show evidence of interpreting the number 349 as 3 hundreds, 4 tens, and 9 ones. You can use the rubric on page 675 to evaluate children's work for **GMP2.2**.

See the sample in the margin. This work meets expectations for the content standard because the explanation indicates an understanding that the base-10 blocks represent hundreds, tens, and ones, and both representations show 349. The work meets expectations for the mathematical practice because the child states that both representations are correct, and the drawing shows that 10 ones can be exchanged for a ten, and 10 tens can be exchanged for a hundred. This work would exceed expectations if the child had explained trading 10 tens for a hundred to make 300 and 10 ones for a ten to make 40. **GMP2.2**

Go Online Assessment Anchors

**Sample child's work, "Meeting Expectations"**

Maria represented the number 349 like this:

Bill represented the number 349 like this:

Write whether Maria, Bill, or both of them represented the number 349. **Both**

Explain your answer. You may include drawings.

I think Both Because Bill has 349 and Maria has 349. Bill has 2 Hundreds and 13 tens and 19 ones that equals 349. I made a ten of ones and I made a Hundred out of tens.

Evaluating Children's Work and Sample Child's Work for Open Response Assessment, Grade 2 Lesson 7-10

## Cumulative Assessment (Even-numbered units)

Items on the Cumulative Assessment address standards from prior units. The Cumulative Assessment gauges students' retention of concepts from prior units without deliberate preparation. As such, it is a helpful tool in measuring students' long-term learning.

### 9.3.3 Interim Assessments

GRADE LEVEL **K** 1 2 3 4 5 6

These periodic assessments are administered at the beginning, middle, and end of the school year. As in Progress Checks, items in the Interim Assessments are written so that students who are meeting expectations for the associated standard(s) at that point in the year will be able to solve them correctly. Teachers can use interim assessments along with information from Progress Check lessons to complete the assessment picture that is generated from ongoing assessments such as the Assessment Check-Ins. Interim assessment data is helpful in communicating progress to families and administrators.

## Beginning-of-Year Assessment

This assessment provides information about students' knowledge and skills related to the content in the first two or three units based on grade-level expectations from the prior grade. The Beginning-of-Year assessment provides teachers with baseline data that can be useful for planning instruction and for Response to Intervention (RtI) screening. Since this assessment only provides information for planning instruction early in the year and is not intended to be used for grading, it is designated as “informal” assessment.

## Mid-Year and End-of-Year Assessments

These formal assessments offer teachers snapshots of students' performance on a sample of standards covered to date. All items are appropriate for grading because they reflect mastery expectations for the standards they assess to that point in the grade. The End-of-Year assessment can provide information on students' levels of skill and understanding to their next-grade teachers.

All Kindergarten interim assessments and the beginning-of-year assessment in first grade match the above descriptions but are designed to be primarily administered face-to-face, rather than as paper-and-pencil tasks. For information on administering the interim assessments in Kindergarten, see pages 5–10 in the *Kindergarten Assessment Handbook*.

## 9.4 Assessment Tools

*Everyday Mathematics* includes a suite of digital and print tools for collecting, storing, analyzing, reporting, and using assessment data.

### 9.4.1 Rubrics for Evaluating Mathematical Practices

#### Task-Specific Rubrics

The Open Response and Reengagement lessons and the Open Response Assessments are opportunities to assess students' progress on the Standards for Mathematical Practice (SMP). Each of these lessons includes a task-specific rubric that can be used to evaluate students' work for a specific *Everyday Mathematics* Goal for Mathematical Practice (GMP).

For information on the Standards for Mathematical Practice in *Everyday Mathematics*, see Section 1.2 *Standards for Mathematical Practice*.

For sample rubrics and evaluated student work, see *Assessment Check-Ins* in Section 9.3.1 and *Open Response Assessment* in Section 9.3.2.

## Generic Rubrics

Generic rubrics for each GMP are available in the back of the *Assessment Handbook* and in the Grade-Level Resources in the Teacher Center. Teachers can complete these rubrics and use them to evaluate students' responses to writing/reasoning prompts, items in the Assessment Check-Ins and Progress Check lessons that address the mathematical practices, and similar problems in other lessons. Teachers may wish to work together in grade-level teams to develop rubrics for selected tasks. These rubrics can be used in subsequent years. A sample teacher-developed rubric for a writing/reasoning prompt in Grade 2 is shown below.

- 5 Writing/Reasoning** Compare the shape in Problem 1 to a square. How are they alike? How are they different?

*Sample answer: They both have 4 sides and 4 right angles, but a square has sides that are all the same length.*

MRB

### GMP7.2 Rubric

SMP7: Look for and make use of structure.

Goal for Mathematical Practice	Not Meeting Expectations	Partially Meeting Expectations	Meeting Expectations	Exceeding Expectations
<b>GMP7.2</b> Use structures to solve problems and answer questions.	<ul style="list-style-type: none"> <li>No property</li> <li>OR</li> <li>Incorrect statement, such as "a square would be shorter."</li> </ul>	<ul style="list-style-type: none"> <li>One property that is the same for the square and rectangle</li> <li>OR</li> <li>One property that is different for the two shapes.</li> </ul>	<ul style="list-style-type: none"> <li>One property that is the same for the square and rectangle</li> <li>AND</li> <li>One property that is different for the two shapes.</li> </ul>	Meets expectations and gives a second property for how the shapes are the same, as in the sample.

Sample rubric for evaluating students' use of GMP7.2 on a Grade 2 writing/reasoning prompt

Guidelines for developing a rubric:

- Identify a target GMP addressed in the task. An SMP will be listed in the footer of the Math Boxes page for writing/reasoning prompts. Appropriate GMPs will be identified in the Assessment Check-Ins and tables in the Lesson Openers for Progress Check lessons.
- To write a statement for "Meeting Expectations," decide what math needs to be evident in the work as evidence that the student met expectations for the GMP. In the example above, identifying one property that the square and the rectangle share *and* one property that is different for the two shapes is evidence that the response meets expectations for the GMP.

- To write statements for “Partially Meeting Expectations” and “Not Meeting Expectations,” first describe “Partially Meeting Expectations” by anticipating what might be incomplete or vague in a response that still shows some evidence of using the GMP. The statement for “Not Meeting Expectations” should identify responses that demonstrate no evidence of the targeted practice or include an incorrect use of the practice.
- To write a statement for “Exceeding Expectations,” anticipate how a response might go beyond what the problem asks or how it might demonstrate a more complete or mature answer than expected for “Meeting Expectations.”

## 9.4.2 Individual Profiles of Progress and Class Checklists

### Individual Profiles of Progress and Class Checklists for Content Standards

Individual Profiles of Progress (IPPs) combine data for individual students from the formal assessments (Assessment Check-Ins, Progress Check lessons, and Interim Assessments). Class Checklists facilitate collecting and recording similar data for the entire class on the same form. Blank masters of these forms are provided in the *Assessment Handbook* for each grade.

Go to the Resource Library in ConnectEd and download the Record-Keeping Masters for unit-specific versions of the IPPs and Class Checklists. These forms can be downloaded and completed digitally or printed and completed by hand.

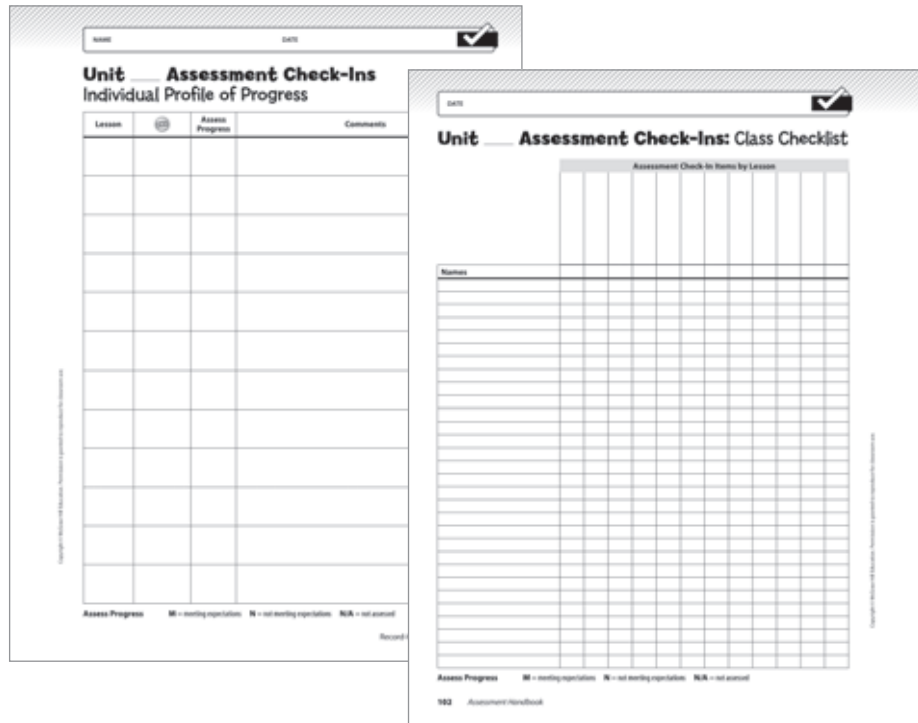
NAME \_\_\_\_\_ DATE \_\_\_\_\_

**Section(s) \_\_\_\_\_ : Individual Profile of Progress**  
Use this sheet to record children's performance on content or practice standards during lesson activities and Assessment Check-ins.

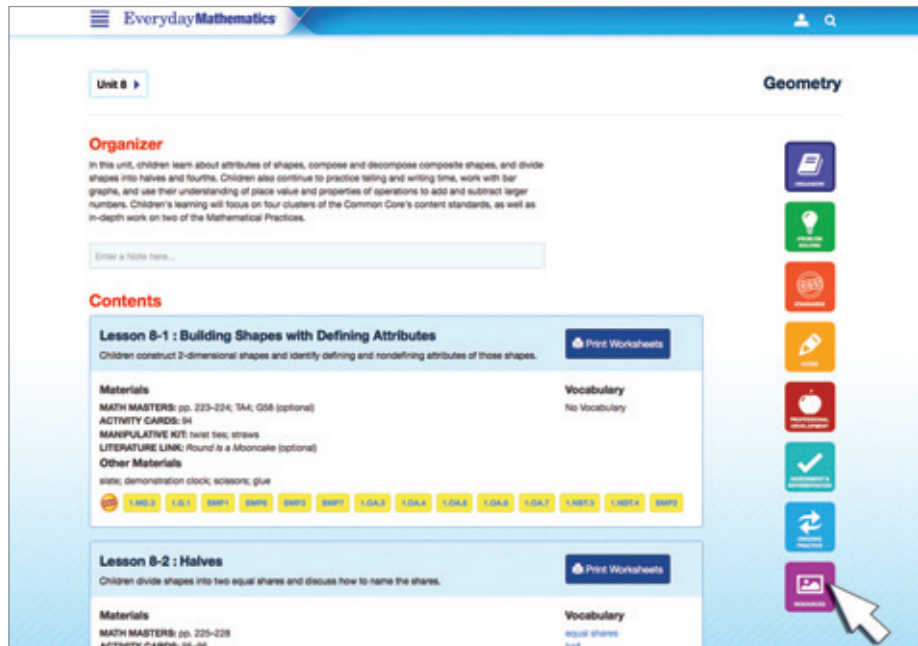
Lesson	Content and/or Practices Assessed	Child's Response(s)	Assess Progress	Comments

Individual Profile of Progress from the Kindergarten *Assessment Handbook*

**Note** All of these checklists are also accessible through the Teacher Center, filled in with the CCSS Standards and SMPs. Go to the Unit Overview screen and click on the Resources button.



Individual Profile of Progress and Class Checklist from the Grade 1 Assessment Handbook



Access checklists through the Teacher Center, Unit Overview screen, Resources link



## Individual Profiles of Progress and Class Checklists for Mathematical Practices

Two types of Individual Profiles of Progress for the Mathematical Practices are available in the *Assessment Handbooks* and in the digital Resource Library. The first can help teachers organize information about student performance on mathematical practices in lesson activities, Assessment Check-Ins, writing/reasoning prompts, and Progress Checks. The second lists the assessment opportunities in the Open Response and Reengagement lessons and Open Response Assessments in the Progress Checks by unit and lesson with the corresponding focus GMPs and SMPs. A Class Checklist with similar information is also available.

DATE \_\_\_\_\_

### Mathematical Practices in Open Response Problems Class Checklist

Names	Open Response and Reengagement Items								Progress Check Items							
	SMP1 GMP1.5	SMP7 GMP7.2	SMP2 GMP2.1	SMP3 GMP3.1	SMP5 GMP5.2	SMP1 GMP1.1	SMP8 GMP8.1	SMP4 GMP4.2	SMP6 GMP6.1	SMP6 GMP6.4	SMP5 GMP5.2	SMP3 GMP3.1	SMP1 GMP1.1	SMP7 GMP7.2		
	1-4	2-5	3-4	4-4	5-12	6-8	7-9	8-4	9-3	1-12	3-12	5-13	7-12	9-12		

Mathematical Practices in Open Response Problems Class Checklist from the Grade 1 *Assessment Handbook*

*Assessment Handbooks* for each grade also contain a Class Record sheet for assessing students' use of the GMPs through direct observation of students engaging in the mathematical practices during classroom activities. The sample below shows examples of observation notes of students engaging in GMP7.1 in a second grade lesson in which partners sort shapes into two categories: shapes with parallel sides and shapes with no parallel sides.

DATE \_\_\_\_\_

### Mathematical Practice Opportunities Class Record

Standard for Mathematical Practice SMP7 Look for and make use of structure.

Goal for Mathematical Practice GMP7.1 Look for mathematical structures such as categories, patterns, and properties.

Opportunity: G2 L8-1 Defining Attributes partner discussion

Names	+ / ✓ / -	Comments
Kayla	+	I Ded correctly using word "parallel"
Joshua	✓	Gestured parallel, but didn't use word
Ava M.	✓	Highlighted parallel sides same color, no word
Justin	-	Focused on same length
Sophia	+	Pointed and said which sides were parallel
Ava R.	✓	Drew over lines and said, "like train tracks"

Sample Mathematical Practices Opportunities Class Record

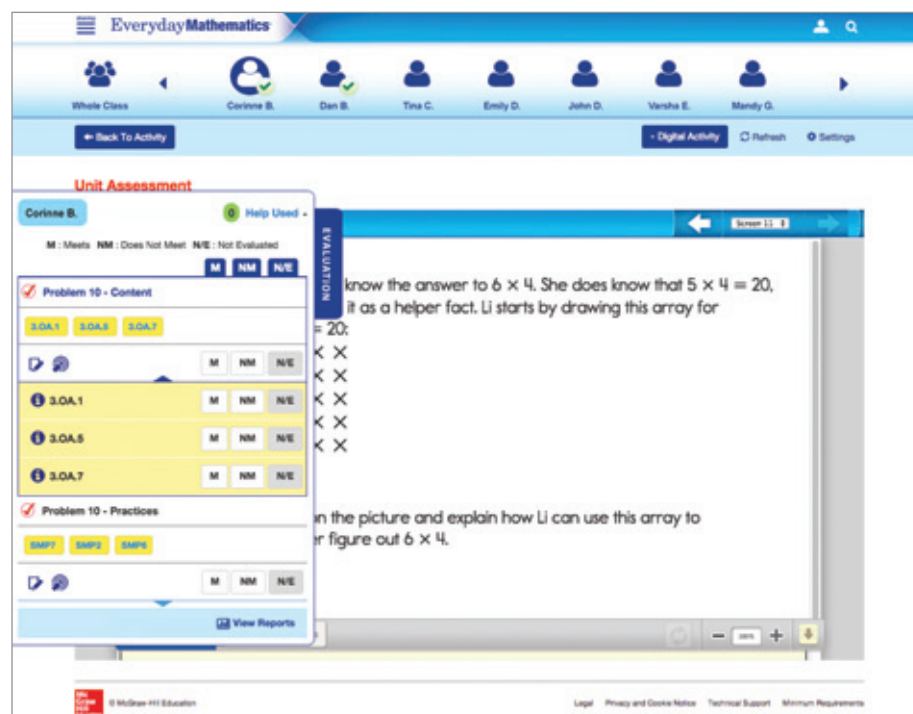
**Note** All of these checklists are also accessible through the Teacher Center, filled in with the CCSS Standards and SMPs. Go to the Unit Overview screen and click on the magenta Resources button on the bottom left. (See previous page for screen view.)

### 9.4.3 Digital Assessment and Reporting Tools

Digital tools available through the ConnectED Teacher Center centralize evaluation and progress reporting.

#### Evaluation

The Evaluation tool, found in the ConnectED Teacher Center, allows teachers to record student performance on activities and problems. To record student performance, teachers choose a student from the top panel, open the Evaluation Panel on the left, and record the score. Each score that a teacher enters in the Evaluation tool is tied to specific CCSS content and standards and *Everyday Mathematics* GMCs and GMPs.



Teacher Center with teacher evaluation panel open

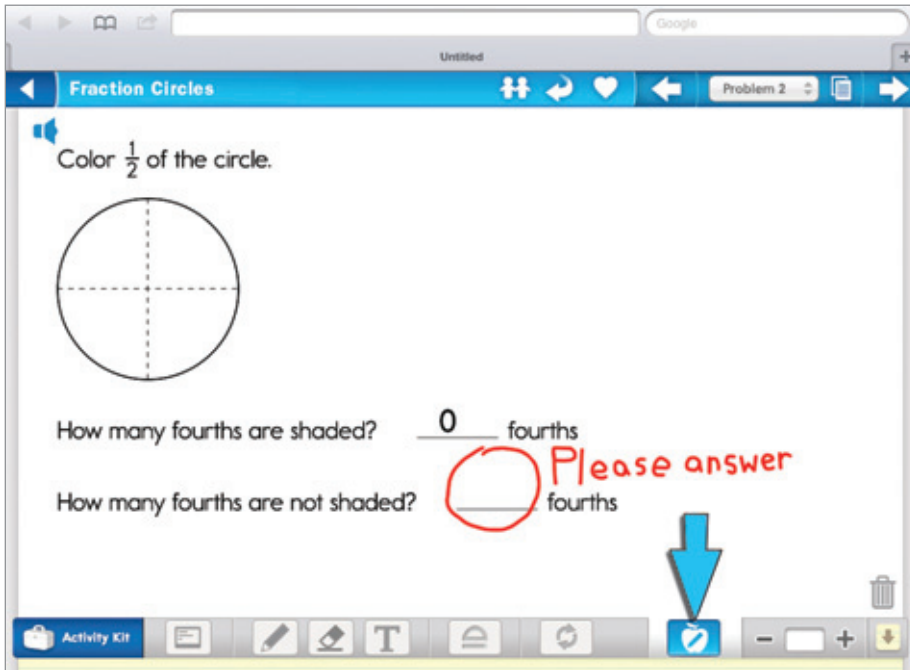
For information on formal and informal assessments, see Section 9.3: *Assessment Opportunities*.

Many formal assessment opportunities are associated with more than one standard. The teacher's evaluation (Meets or Not Meets) maps to every standard associated with the assessment. Some assessments, particularly Assessment Check-Ins (ACIs), are made up of more than one problem. In these cases, the system records only a single evaluation (Meets or Not Meets) for the entire assessment opportunity. For example, if the assessment opportunity consists of three problems, the evaluation panel for the entire assessment will be on the final problem. If a teacher decides not to evaluate, the activity or problem receives the *not evaluated* (NE) label.

If teachers would like to gather additional data on student performance, they can evaluate other activities such as Warm Up and Practice activities. The Evaluation Tabs for these activities will be labeled *informal assessment*.

For both formal and informal assessment, teachers can use the Score Configuration feature to select which scoring scale they wish to use to record student performance on activities and problems. Teachers can choose to use either a two- or four-point scale. The default scale is the two-point scale, which offers a *meets* (M) or *does not meet* (NM) selection for the teacher.

If students complete their work in the Student Learning Center using a digital device, the teacher can see that work by selecting “Digital Activity.” As the teacher reviews student work, he or she can select a writing tool and add feedback. When students go to the activity screen in their Student Learning Center, they see any notes from their teacher.



Students click on the apple icon to see their teacher’s notes

If students complete their work using a print resource such as *Math Journal*, *Math Masters*, or *Assessment Handbook* pages, teachers can record student performance digitally. In the Teacher Center, click on the Digital Activity button and toggle to “Print Activity” to record student performance while viewing the page with answers.

The screenshot shows the 'Everyday Mathematics' digital activity interface. At the top, there is a navigation bar with the logo and a search icon. Below this is a user selection bar with icons for 'Whole Class' and individual students: Corinne B., Dan B., Tina C., Emily D., John D., Varsha E., and Mandy G. A 'Back To Activity' button is on the left, and a '- Digital Activity' dropdown menu is on the right, with 'Print Activity' selected. The main content area is titled 'Unit Assessment' and features a vertical 'EVALUATION' sidebar on the left. The assessment includes three questions:

- Question 4: Two parts, (a) 'Write an addition fact for the domino.' with the answer  $3 + 4 = 7$ , and (b) 'Write the turn-around fact.' with the answer  $4 + 3 = 7$ .
- Question 5: 'Write at least five names in the 12 box.' The answer box contains the number '12' and the text: 'Answers vary but should be equal to 12. Sample answers:  $6 + 6$ ,  $10 + 2$ ,  $12 + 0$ ,  $13 - 1$ , twelve'.
- Question 6: 'Take an even number of pennies. Answers vary but should be even. How many pennies did you take? should be even. How do you know that the number of pennies is even? Answers vary but should demonstrate understanding of an even number.'

At the bottom of the interface, there is a footer with the McGraw-Hill Education logo and links for 'Legal', 'Privacy and Cookie Notice', 'Technical Support', and 'Minimum Requirements'.

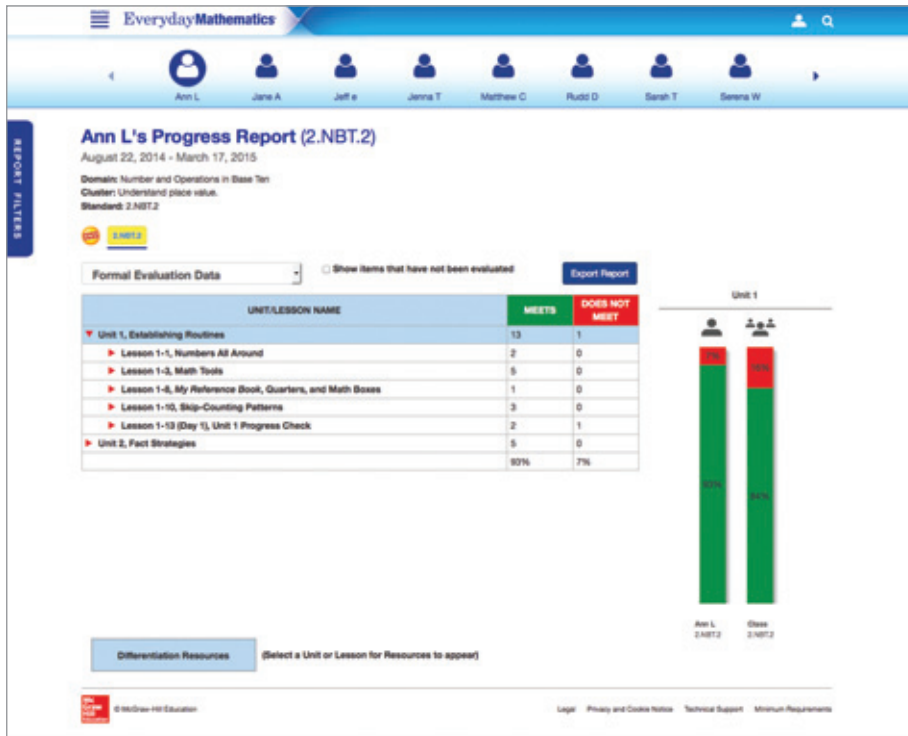
See pull-down menu to select Print Activity

## Progress Reporting

Monitoring student progress is an important part of successfully implementing *Everyday Mathematics*. The Progress Report tool provides information showing how students and classes have performed on a domain, cluster, or standard. This tool can help teachers understand how students are progressing toward mastery so they can adjust instruction as needed.

The data in the Progress Report tool comes from evaluations that teachers have made using the Evaluation tool.

The Progress Report tool displays information from both formal assessments—such as Assessment Check-Ins and Progress Checks—and informal evaluations—such as, writing/reasoning prompts and Math Boxes. Formal and informal data are presented in separate report views.



Progress Report for Ann L.

There are a variety of ways teachers can control the data that appears in the Progress Report. They can choose a specific time frame; can review at the standard, cluster, or domain level; and can view performance for students and classes. For example, teachers may ask for reports on a given standard and limit the timeframe to the lessons in which the instruction and practice on that standard is nearly complete to identify which students are still struggling with the standard. Teachers can export the data to view, print, and manipulate in spreadsheets or other tools.

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