wireless generation®




mCLASS® Math | Screening and Progress Monitoring Guide Grades K-1

Download the latest mCLASS:Math materials at
www.mclasshome.com on the Support & Resource Center.

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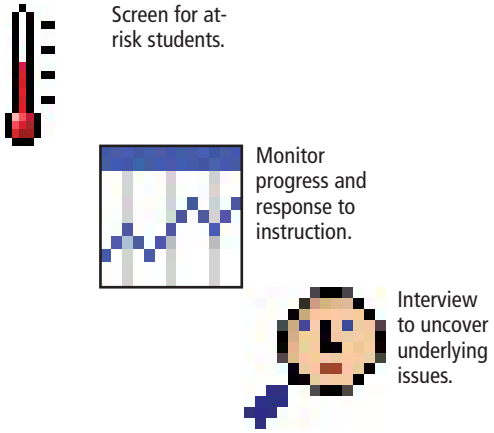
Introduction

The mCLASS®:Math program, available in both English and Spanish, is an integrated screening, progress monitoring, and diagnostic assessment system that helps determine children's understanding of mathematical skills and concepts in kindergarten through third grade.

This comprehensive assessment helps educators identify students who may be at risk for math difficulty (Screening), to monitor student progress and response to instruction (Progress Monitoring), and to conduct investigative interviews to understand the cognitive processes underlying performance (Diagnostic Interviews). The combination of these results can guide instruction in a way that positively affects mathematical development.



There are four elements of the mCLASS:Math assessment, Screening, Progress Monitoring, Diagnostic Interviews, and Activities. Check the Support & Resource Center at www.mclasshome.com to download the latest user guides and supplementary materials.

The mCLASS:Math software guides assessors to:

- Measure an individual child's mastery of fundamental mathematical skills
- Acquire insight into a child's mathematical thinking
- Help children overcome mathematics learning difficulties
- Think more creatively about mathematics teaching and learning
- Track critical mathematics skill development
- Conduct meaningful mathematics instruction

The mCLASS:Math assessment is used to develop reports used by teachers, coaches, and administrators to:

- Review classroom and student data useful for gauging success in mathematics learning
- Provide assessors with time-sensitive professional development involving early mathematics learning and interviewing techniques

The mCLASS:Math System

Employing the innovative handheld-to-Web technology used for mCLASS literacy assessments, the mCLASS:Math software has been designed to make mathematics assessment more effective, helping assessors analyze data to shape instruction. Preliminary studies of mCLASS assessments show that the software saves assessors time, guides assessors through complex diagnostic tools, and closes the loop between assessment and instruction.

The mCLASS:Math system has five components, all aimed at fostering successful mathematics skill development.

1. Software: Includes all tasks, instructions, and practice questions for each grade level, as well as results calculations.
2. Kit: Contains the Diagnostic Interviews Guide and Workbook, the Screening and Progress Monitoring Guide and Workbook, and an Activities Guide.
3. Synchronization: Transfers the assessment information from the handheld to the database maintained at https://www.mclasshome.com.
4. Reports: Provides Web-based class and student reports to aid in defining instructional changes.
5. Activities: Recommends exercises that are strategically connected to each child's results.

Screening and Progress Monitoring

The Screening and Progress Monitoring components work together to identify potentially at-risk students and to aid in assessing response to instruction for those students. The Screening assessment is administered during benchmark windows at the beginning, middle, and end of the school year. Progress Monitoring should happen throughout the year (at least one measure for each student every 14 days); however, frequency of administration should be higher for students with greater intervention needs.

- Screening and Progress Monitoring are designed to assess three broad categories of mathematical thinking: Quick Retrieval, Number Sense, and Written Computation.
- Each measure correlates to scientifically valid standardized measures.
- The six measures of Screening and Progress Monitoring are Counting, Missing Number, Next Number, Number Identification, Number Facts, and Quantity Discrimination.

Screening and Progress Monitoring focus on everyday performance in the classroom.

The Screening assessment identifies children who may be at risk for math difficulty and who would benefit from Progress Monitoring and Diagnostic Interviews. Six brief but effective research-based measures are administered to students individually to identify those who are struggling and to aid in grouping students for instruction.

The Progress Monitoring assessment provides a way to detect whether at-risk children are progressing at a rate that will get them back to grade level. Since this assessment is ongoing, it takes a snapshot of the child's mathematics skills development and, equally as important, provides support for adapting instruction toward greater achievement in this subject area.

Diagnostic Interviews

Students are assessed through a series of interviews, exercises, and stimulating conversations that measure development of mathematical concepts and foster a child's ability to articulate knowledge of his or her own mathematical thinking. The mCLASS:Math software analyzes a child's answers and problem-solving strategies, providing assessors with recommendations for instructional activities that help the child master the skills and concepts addressed.

The interviews are administered in a consistent manner to ensure fair and reliable measures of child performance. The mCLASS:Math software guides the administration of standardized mathematics items appropriate to the child's grade level.

Diagnostic Interviews reveal the child's underlying thinking to the assessor.

- Interviews are designed to assess counting, addition, subtraction, multiplication, and written math skills.
- Each interview has multiple modules that correspond to specific mathematics principles.
- Instructional recommendations are based on each child's performance and employment of particular strategies.
- Activities are suggested for the entire class and individual children.

ACT

The **ACT** tab provides a list of activities customized to a child's needs. Activities are suggested on www.mclasshome.com, and the research-based classroom activities are printed in the Activities Guide available with each kit. To join our community of teachers who contribute activities to this product, please email mathact@wgen.net.

Research Base

The mCLASS:Math system is based on modern developmental, educational, and cognitive science research that shows how children develop mathematical knowledge. The research underlying the assessment highlights several essential features of children's mathematical learning:

- Children develop everyday mathematical knowledge outside school and use it to assimilate what is taught in school.
- Both basic skills and conceptual understanding are essential for mathematics proficiency.
- Children use a variety of strategies to solve mathematical problems.
- Limitations in memory contribute to children's mathematics difficulties.
- Children with mathematical learning difficulties often possess important intellectual strengths, such as informal strategies useful for counting.

The mCLASS:Math system provides assessors a way to use these research findings and ideas in their pedagogy with tools that interpret a child's answers and behavior and then suggest an effective approach to instruction.

It is crucial for assessors to follow not only what their children understand, but also how they understand. Administrators should be guided by a research- and theory-based view of mathematical

proficiency. Evaluations ought to measure how effectively programs promote both basic skills and deeper understanding. The development of the mCLASS:Math system brings the research findings and theories to bear on the thinking and practice of both assessors and administrators.

Background

The mCLASS:Math assessment draws upon three major schools of thought.

1. The extensive cognitive science literature of "Mathematical Thinking and Learning" (Ginsburg, Cannon, Eisenband, & Pappas, 2006), "The Development of Children's Mathematical Thinking" (Ginsburg, Klein, & Starkey, 1998), and other supporting publications shaped the development of the mCLASS:Math program so that it would:
    - Embed key cognitive concepts
    - Include a focus on number sense, shown to be important in predicting academic achievement
    - Consider the memory limitations that appear to contribute to mathematics learning problems
    - Account for strategies and backup strategies that underlie children's arithmetic, as well as the concepts that demonstrate understanding of the basic operations
2. Curriculum-Based Measurement (CBM), the two-part screening and progress monitoring methodology, promotes repeated assessment to advance long-range instructional goals. Teachers with mCLASS:Math use CBM methodology when they:
    - Administer short assessments on a frequent basis
    - Graph scores to evaluate a child's progress toward specific goals
    - Use data to make decisions about the effectiveness of instruction and to identify students who might be struggling or who are at risk
    - Monitor progress by administering alternate forms of the measures to evaluate whether students are on track or need additional intervention to meet identified goals
3. The tradition of clinical interview, originally developed by Jean Piaget and used extensively since that time in cognitive developmental research and education, defines the kind of flexible questioning that is especially valuable for formative assessment in the classroom. The mCLASS:Math assessment uses this approach to:
    - Help educators uncover underlying thinking in a way that standard tests or CBM measures cannot uncover
    - Guide the teacher through complex questioning

Categories of Mathematical Thinking

The mCLASS:Math Screening and Progress Monitoring assessments combine three categories of mathematical thinking (Quick Retrieval, Number Sense, and Written Computation) to cover the essential skills of early mathematics: retrieving information quickly, computation, and comprehension of mathematical concepts.

Quick Retrieval

There is widespread agreement that quick retrieval of the basic number facts, or combinations, is both important for learning mathematics and useful for a CBM task. The research shows that knowledge

of number combinations predicts achievement and that children who experience difficulty with math often do poorly on number combinations. In its essence, quick retrieval means that children get the answer quickly and do not have to expend much mental energy on calculation. Quick retrieval may result from rote memory or from fluency using rapid counting or basic principles such as the commutativity of addition. Currently, the mCLASS:Math assessment assesses quick retrieval through the Number Facts measure.

Number Sense

A series of items gauge a child's general ability to draw conclusions from working with numbers. Number sense involves basic intuitions and ideas about numbers, including concepts that make computation easier or eliminate the need for it altogether. Number sense includes the ability to compare the magnitude of numbers, to understand the relative effect of arithmetical operations on numbers, and to have meaningful referents for number and quantity. It also includes the ability to know whether certain numbers are plausible answers to certain problems; to break numbers into convenient parts that make calculation easier; and to apply basic operational rules to arithmetic equations. The mCLASS:Math assessment uses multiple indicators to evaluate number sense.

- In kindergarten, mCLASS:Math measures a child's ability to count out loud (Counting), to discern between the quantities of two sets of numbers (Quantity Discrimination), and to identify the missing number from a pattern of three numbers (Missing Number).
- In first grade, mCLASS:Math continues to measure the abilities assessed in Quantity Discrimination and Missing Number. It also measures the child's ability to name the number that follows a verbally presented number (Next Number).

Written Computation

This straightforward category involves basic reading and understanding of written mathematics. Previous research has found high alternate form reliability, test-retest reliability, and criterion validity for this kind of measure.

In kindergarten and first grade, the Number Identification measure examines a child's ability to identify individual, randomly generated numbers between 1 and 100. The mCLASS:Math assessment also offers early indicators of written abilities even before children begin solving written computation problems.

Results of Pilot Data Collection

To establish the validity of the mCLASS:Math Screening and Progress Monitoring measures, pilot data was collected from 135 kindergarten and first grade students using a paper version of the measures. Assessors followed written instructions in administering the materials, which are now provided on the handheld. The mCLASS:Math research team administered the Counting, Missing Number, Number Identification, and Quantity Discrimination measures to kindergartners and Number Identification, Number Facts, Quantity Discrimination, Next Number, and Missing Number measures to first graders. Every student was also given a standardized math assessment, the Test of Early Mathematics Ability (TEMA). Using the pilot data, mCLASS:Math researchers fit several preliminary structural equation models to evaluate the strength of the relationships between Early Numeracy Proficiency, measured by each of the domains of the Screening and Progress Monitoring, and the TEMA scores, as well as the interrelationships among the mCLASS:Math measures. Initial analyses showed strong correlations between the mCLASS:Math measures and the TEMA, indicating that the measures are valid indicators of early mathematics performance.

Risk Levels and Overall Status for Grades K-1

Research Background and Findings

The mCLASS:Math research team administered the assessment's grade-appropriate measures to kindergartners and first graders. Each student was also given the standardized Test of Early Mathematics Ability (TEMA) or the math sub-test Young Children's Achievement Test (YCAT). The team found strong correlations between the mCLASS:Math measures and these established criterion variables, indicating that the measures are valid indicators of early mathematics performance.

By comparing the norm-referenced TEMA or YCAT assessments and scores to national mCLASS:Math data collected in the fall and spring of the 2006-2007 school year, the researchers were able to determine benchmarks for the measures. In each of the measures, students are considered at risk for difficulty achieving a goal at specified points in the academic year if they perform in the lowest 25th percentile of sample norms. Students who perform above the 75th percentile using sample norms are considered to be at low risk.

Risk Levels and Benchmark Goals

As an index of performance on an individual measure, Risk Levels of Deficit, Emerging, or Established are assigned relative to that measure's goal, the student's grade, and the time of year. On both the handheld and the Web, each Risk Level is represented by a colored box.


Deficit (red) – Far below benchmark expectations


Emerging (yellow) – Advancing toward, but not meeting, benchmark expectations


Established (green) – Meets or exceeds benchmark expectations

Each assessment period has its own Benchmark Goal, which is the fluency score required to be Established at that time of year. As an example, during the middle of the year in kindergarten, students who count in the range of 30–69 during the one-minute measure are not hitting the Benchmark Goal and are considered Emerging. Students who score 29 or less are considered Deficit. Those who score 70 or more meet the Benchmark Goal and are considered Established.

Keep in mind, Benchmark Goals are minimums. Ultimately, all students should be Established by or during the End-of-Year assessment period; this is called the End-of-Year Goal. For instance, every kindergartner should be able to count from 83 upward before the year's end.

With more research, goals may continue to be refined.

Overall Status

After the student has completed all of the applicable measures for an assessment period, an Overall Status is designated, signifying the amount of instructional support that may be necessary for a student to continue on a path toward success in mathematics. Overall Status is based on a combination of Risk Levels and is more an evaluation of Risk Levels than a sum of the measures' scores; the evaluation differs by grade.

The circular Overall Status icon appears on both the handheld and the Web. Each type of Overall Status represents the general instructional support recommended for a young student to become a well-developed, mature student of mathematics.

- Intensive (red) – Thorough instructional support is recommended.
- Strategic (yellow) – Heightened instructional support is recommended.
- Benchmark (green) – Current instructional support is sufficient.
- Incomplete (gray) – Not all measures are finished.

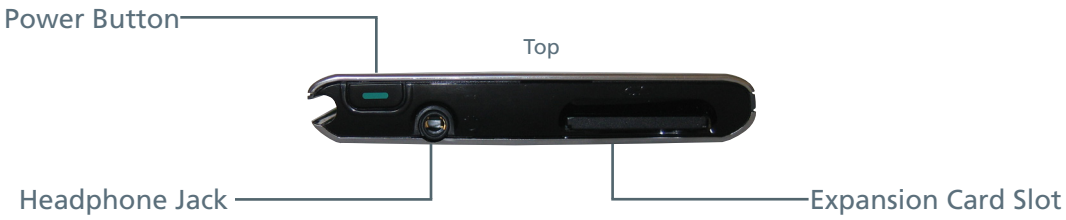
Overall Status by Grade and Assessment Period			
Grade	Intensive (Red)	Strategic (Yellow)	Benchmark (Green)
Kindergarten	Deficit for two or more measures	Any combination that does not fit the Intensive or Benchmark criteria	Established on two or more measures, without any Deficit
Grade 1	Deficit for two or more measures, without any Established	Any combination that does not fit the Intensive or Benchmark criteria	Established on three or more measures, without any Deficit
	Deficit for four or more measures and one or less Established		Established on four or more measures and one or less Deficit

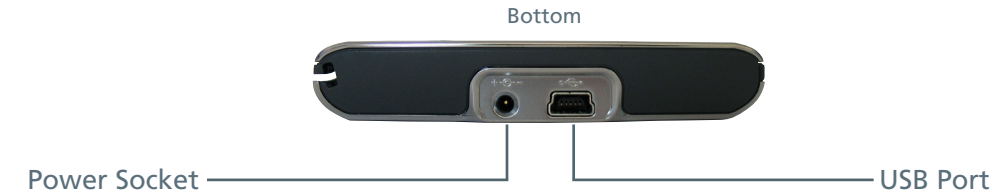
The Handheld Computer

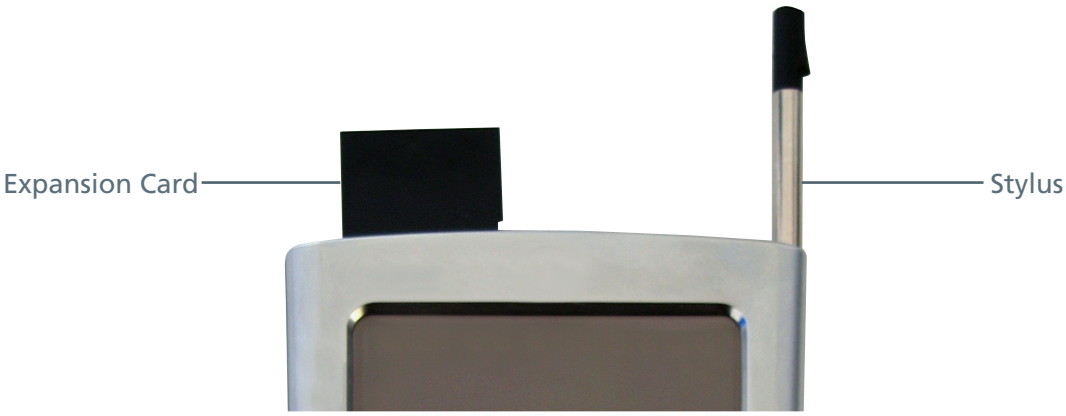
The handheld computer, or handheld, provides the mobility and function needed to utilize Wireless Generation's mCLASS® software solutions. To begin assessing students, you must first become familiar with a handheld.

Some features outlined here may differ depending on the model you are using. Explore your handheld's specific functions by taking a "Quick Tour." Tap the **Quick Tour** icon on the handheld's Main menu.

Key Features







Application Buttons

5-Way Navigator: select and scroll

Note Pad: jot notes about students

Tasks: organize to-do list

Contacts: maintain an address book

Calendar: manage schedule, set reminders

Input Area

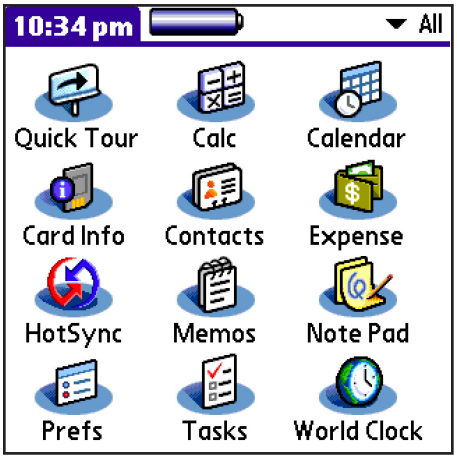
Home: access any of your applications

Star: begin sync process or view categories

Find: search feature

Writing area: write using point-sensitive strokes

Menu: open drop-down menus

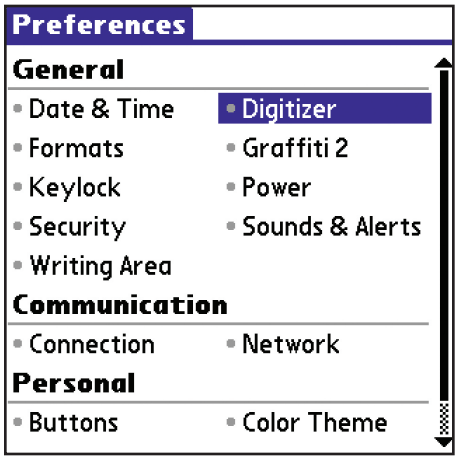


Preferences

Main Menu

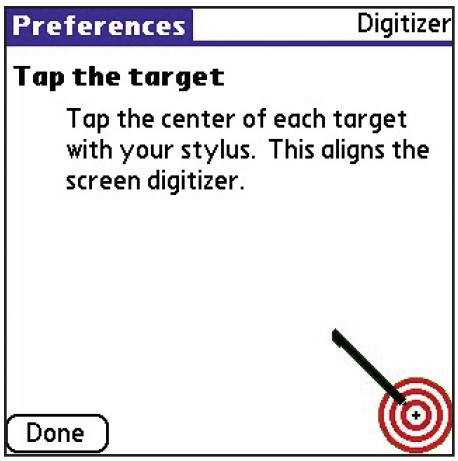
The Main menu provides access to all handheld functions.

1. Make sure that All appears on the pick list in the upper right of the Main menu by tapping the arrow and selecting that category.
2. Tap the **Prefs** icon.



Preferences Menu

Define your system preferences in this menu, including sound, date and time, writing area, and power management.

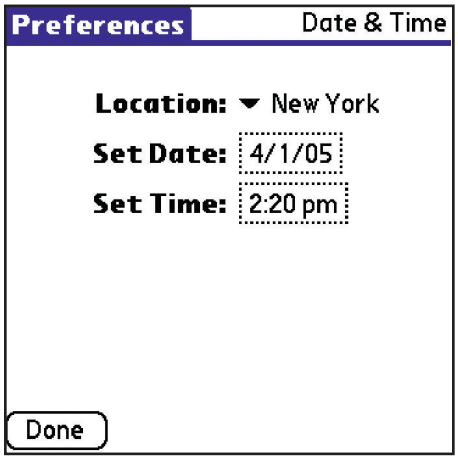


Digitizer/Touchscreen

The Digitizer and Touchscreen applications calibrate the handheld to the touch, aligning the position of the stylus to the screen's electronic touch sensors.

1. Select **Digitizer** or **Touchscreen** from the Preferences menu.
2. Hold the stylus as you would a pen.
3. Tap the center of each target on the screen until calibrated.

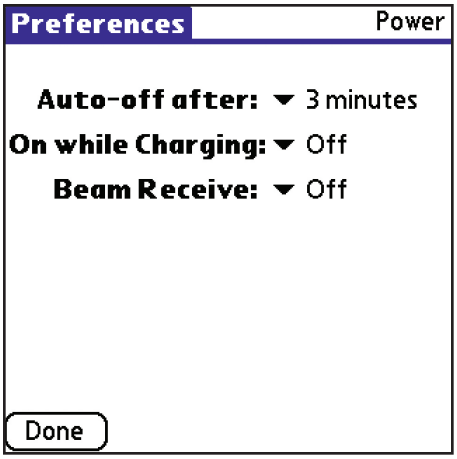
Repeat this process when the handheld doesn't respond properly to light tapping.



Date and Time

Student's assessments are time stamped for reporting purposes. Setting the correct date and time is critical for synchronization and collection of accurate data.

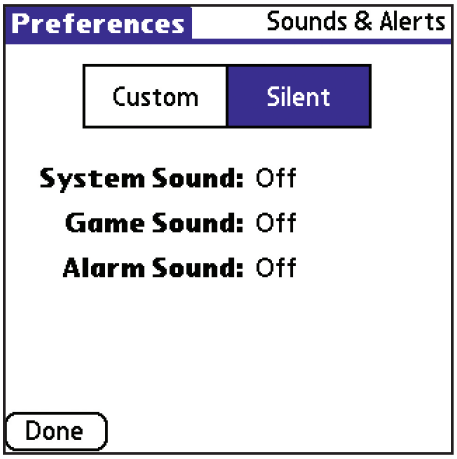
1. Tap the **Location** arrow to select your city.
2. Tap the dotted **Set Date** and **Set Time** boxes to open dialogs that guide the rest of the process.
3. Tap **Done** when finished.



Power Management

In order to conserve battery life, the handheld automatically turns off after a certain length of idle time. During assessment periods, set the handheld to turn off after 3 minutes.

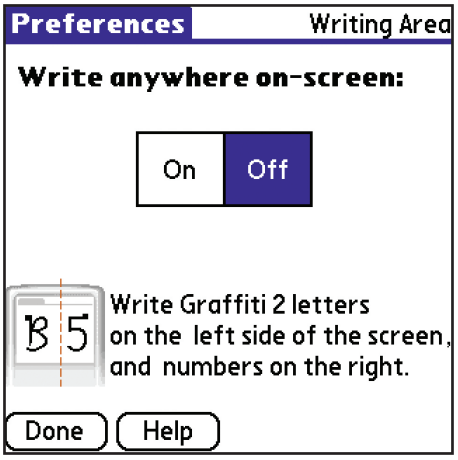
1. Tap the arrow to set **Auto-off** to 3 minutes.
2. Set **On while Charging** to Off.
3. Set **Beam Receive** to On.
4. Tap **Done** when finished.



Sounds and Alerts

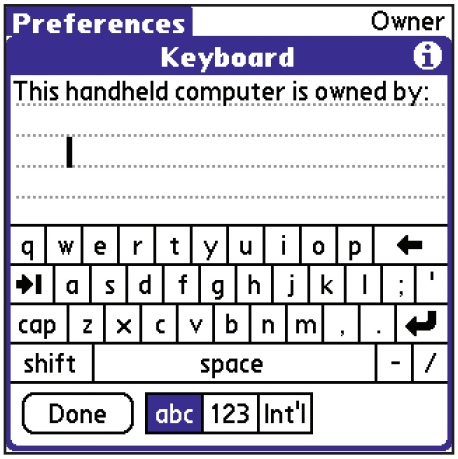
Control the level of the different types of sounds on the handheld. System sounds are sounds the handheld makes when performing system functions, such as syncing.

1. Select **Silent** to prevent sounds from interrupting an assessment.
2. Tap **Done** when finished.



Writing Area

When working with mCLASS applications it is important to have the writing area constricted by putting it in the Off mode. Writing will then be available within the input area only. Write letters on the left side of the text input area and numbers on the right side. Capital letters are made by writing between the letter and number areas.



Entering Text

Practice entering text by setting the owner of your handheld. This name may be changed, but changing the name here will not change the desktop application's user name.

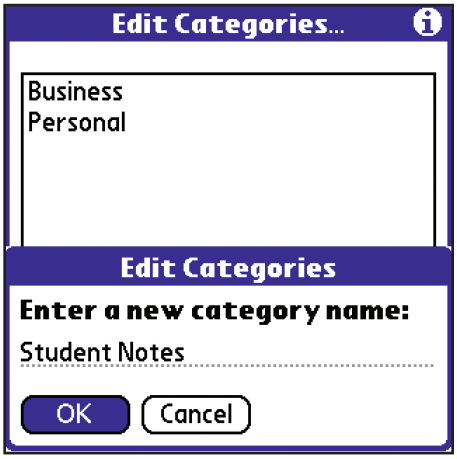
1. Once the blinking cursor appears, write directly in the input area.
2. You may also tap **ABC** within the input area to open the onscreen keyboard and type.
3. Tap **Done** when finished.

Other Features

Note Pad

The Note Pad is another useful feature both for personal and classroom purposes. Many teachers use it to record student observations throughout the school day.

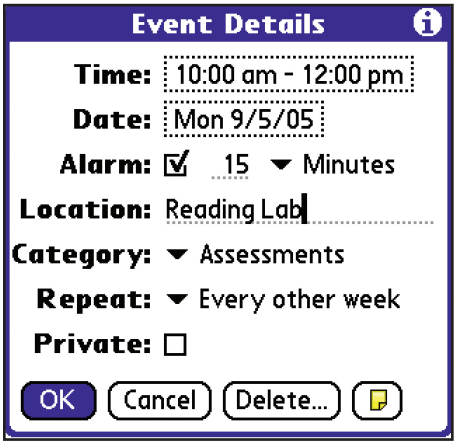
1. Tap **Note Pad** on the Main menu or press the application hard button.
2. Begin writing directly on the screen to create a new note or tap **New**.
3. Place the note in a category by choosing from the pick list in the upper right.



Categories

Categories function like a filing system for information stored on the handheld.

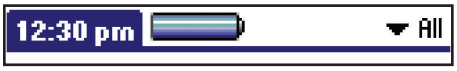
1. From the Main menu, and almost any application, choose **Edit Categories** on the Category pick list.
2. Tap **New** to create a category (for example, Student Notes to organize observations recorded using Note Pad).
3. Tap **OK** when finished.
4. Check the application's pick list to verify that the new category appears.



Calendar

Use the calendar to plan activities ahead of time. During assessment periods it may be useful to block time for students and set alarms to help stay on schedule.

1. Tap the **Calendar** icon or press the application button.
2. Tap an empty line to plan a new event, then tap **Details**.
3. Assign values to date, time, category, and recurrence as needed.



Full power

Half power

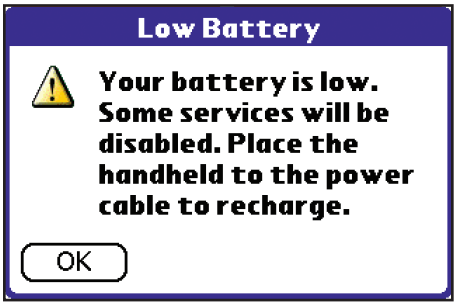
Battery charging

Battery

Power Gauge

If the battery drains, all information entered after your last sync may be lost. Frequent charging is the only way to avoid information loss unless you have a handheld with persistent memory. See your handheld's manual for more information.

- As the battery discharges, the gauge loses its color.
- When the handheld is plugged in with the power cord, a lightning bolt indicates that the battery is charging.
- Recharge the handheld or replace removable batteries as soon as the low battery warning appears.



Information Loss

If the battery has run down and assessments have been lost, recharge and sync three times. Only data synced *prior* to battery loss can be recovered.

1. Sync at an mCLASS Sync Station to restore data from the backup folder.
2. Tap **WGSync**, then enter your user name and password.
3. Sync once to install updates and again to update class data.
4. Verify that all applications and assessment data have been recovered.
5. Confirm that the date is correct.

Reset

If the handheld locks up, try resetting. Depending on the severity of the problem, different types of resets may be performed. Never use a sharp object (some styli have a reset pin under the tip).

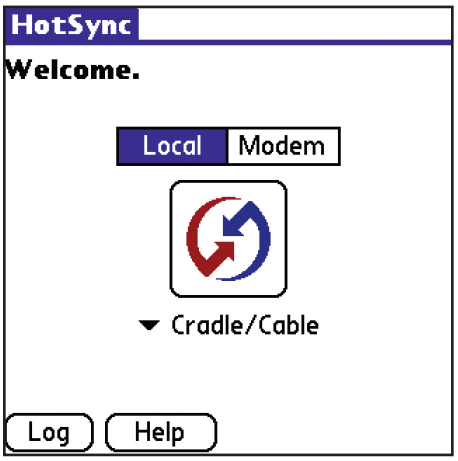
1. Soft reset: Press the **Reset** button on the back panel until the logo screen appears.
2. Warm reset: Hold the **Up** button on the five-way navigator and press the **Reset** button until the logo screen appears.
3. Hard reset: *This will delete all unsynchronized records*. Repeat step 1 while holding down the **Power** button.

Synchronization

The Process

Synchronization is the operation by which the handheld and computer exchange information. You can never sync too often, and you should sync at least once a day.

The computer must be connected to the Internet when syncing with the mCLASS server. This syncs assessment results, downloads updates, and automatically creates reports.



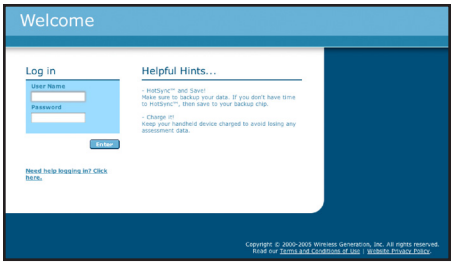
Syncing

1. Plug the sync cable into both the handheld and the computer's USB port. For some models, you will place the handheld on a cradle.
2. Tap the **Sync** button on the Main menu then on the Sync screen.
3. Log in to https://www.mclasshome.com to ensure that the current date appears beneath Sync Status on the right side of the screen.

WGSync

WGSync is the application that tells your handheld to exchange assessment information with Wireless Generation's servers.

1. Tap **WGSync** on the Main menu.
2. Verify user name and password or enter that information for the first time by tapping the boxes.
3. Tap **OK**.
4. Tap the **Home** soft button on the handheld to return to the Main menu.



Secure Web Site

Only data involving mCLASS products are synced to the secure mCLASS Home Web site. After checking the Sync Status, you may check assessment results, see "What's New" at Wireless Generation, update settings, and consult the Support & Resource Center.

The Support & Resource Center contains up-to-date user guides and helpful troubleshooting information.

Sync Troubleshooting

Handheld Not Syncing

If you are using an mCLASS Sync Station but nothing happens when you sync:

1. Verify that the sync cable is plugged into both the handheld and the computer.
2. Verify that the sync icon appears on the desktop's toolbar. If not, go to the Start menu, open Program Files, then your handheld software and select your sync manager.
3. If you still cannot sync, reboot the computer and repeat the first two steps.
4. If this issue is not resolved, contact Wireless Generation's Customer Care department by email at help@wgen.net or call (800) 823-1969, option 3, Monday-Friday 7 a.m. – 7 p.m. EST.

Assessment Results Not Synced

If your assessment results have not synced, confirm that:

1. The Sync Station computer has a live connection to the Internet
2. The mCLASS:Sync software has been installed on the computer.
3. The WGSync icon appears on the Main menu.
4. Your user name and password are entered, and that is the same user name and password you use to log in to https://www.mclasshome.com.
5. The conduit is on the list of items and set to synchronize. To check this, click the **Sync icon, then click the Custom tab.**

Classes Not Appearing on the Handheld

If your classes do not appear on the handheld after syncing, confirm the following:

1. You've synced twice after installing WGSync at an mCLASS Sync Station.
2. The user name and password on the handheld are the same as those used to log in to https://www.mclasshome.com.
3. A Class list has been created on mCLASS Home.
4. You are the teacher assigned to the class. To check this, go to the Class section of the Web site and verify that you are designated as an Owner of this class.

Administration Schedule

Measures in both Screening and Progress Monitoring are administered according to grade level.

Measures by Grade

Measure	Grade Level	
	Kindergarten	Grade 1
Counting	Yes	Yes
Missing Number	Yes	Yes
Next Number	No	Yes
Number Identification	Yes	Yes
Number Facts	No	Yes
Quantity Discrimination	Yes	Yes

Screening Windows

It is recommended that mCLASS:Math Screening take place during three distinct periods of time. These time periods are called screening windows.

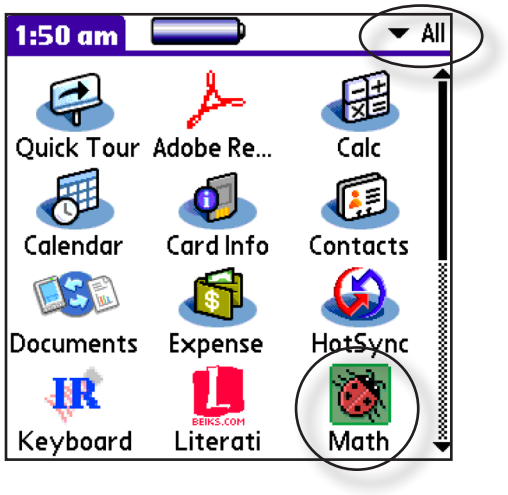
1. Beginning of Year (Beg) assessments are usually conducted in September and October.
2. Middle of Year (Mid) assessments are usually conducted in January and February.
3. End of Year (End) assessments are usually conducted in April and May.

Progress Monitoring Frequency

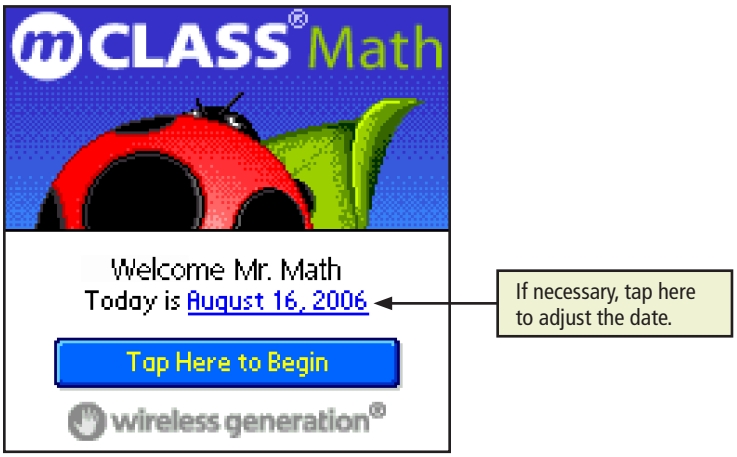
Monitor progress in at least one measure every 14 days.

Starting a New Measure

1. Turn on the handheld and select **All** from the list in the upper right of the Main menu.
2. Tap the **mCLASS:Math** icon.



3. The mCLASS:Math Home screen appears. Tap **Tap Here to Begin**.

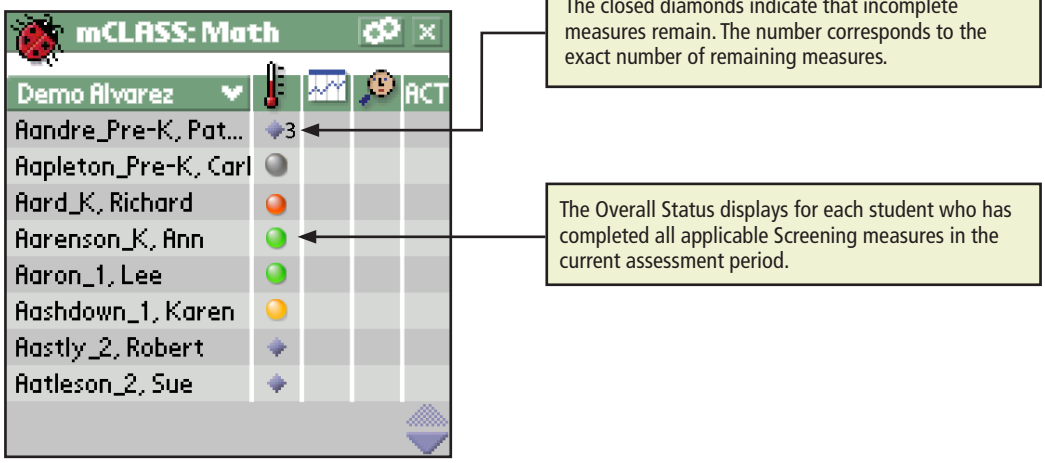


Class List

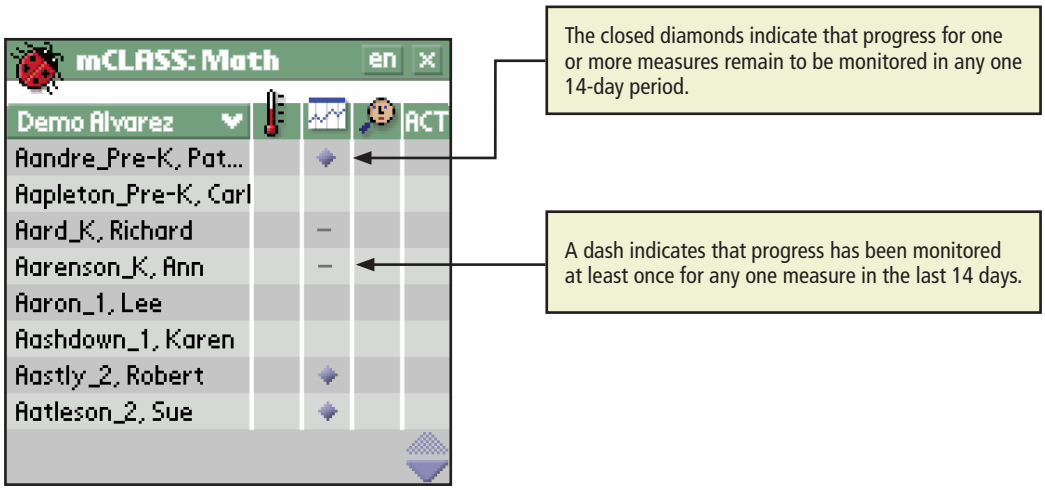
This screen displays each class to which you have access. The diamonds and dashes in the Screening column of the Class List still convey states of completion and serve as a jumping-off point for starting administration, which also remains exactly the same. The red, yellow, and green circles that represent Intensive, Strategic, and Benchmark Overall Statuses, respectively, are a concise way to see how each student is performing in the current assessment period.

- Choose one of two languages by tapping **EN** for English or **ES** for Spanish. Only words spoken to or by the child appear in Spanish; all navigational elements and instructions to the assessor remain in English.
- If you have more than one class, tap the **Class** list in the upper left to choose among them.
- Use the symbols to guide your choice of which child to assess.

Screening



Progress Monitoring



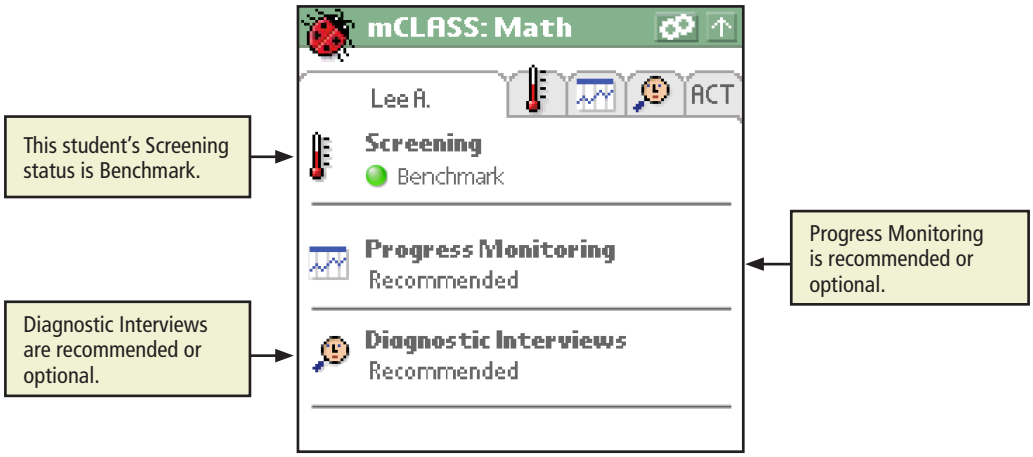
- To assess, tap a child's name or the icon corresponding to a recommendation in the appropriate column.

Student Menu

Select a child to open his or her Student Menu. This menu provides access to the different parts of the mCLASS:Math assessment, including the Student Home (represented by the child's name), Screening administration (thermometer), Progress Monitoring features (chart), Diagnostic Interviews (magnifying glass), and Activities (ACT).

Student Home

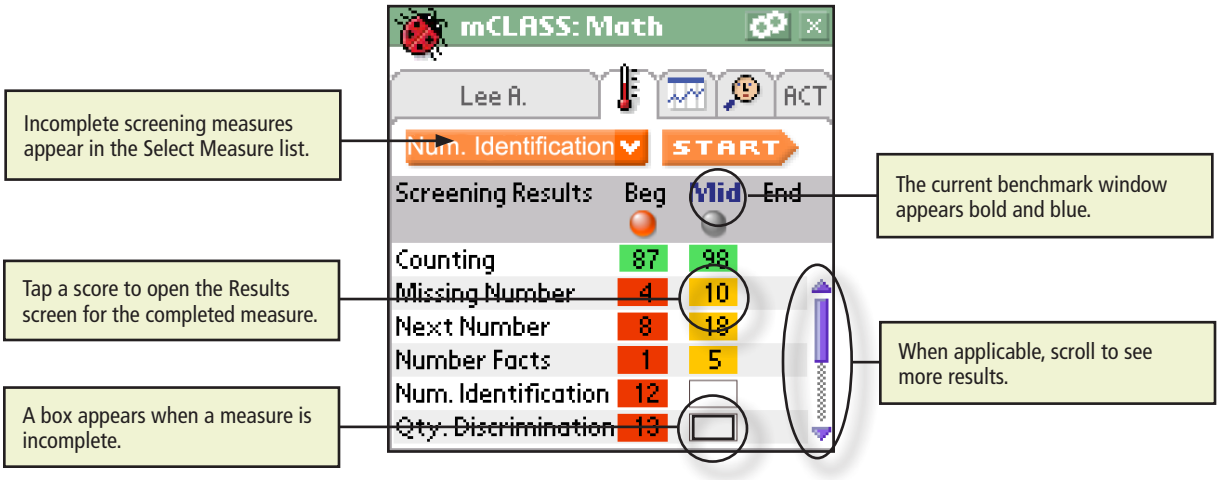
The Student Home provides an overview of a student's progress in each area of the mCLASS:Math assessment. Quickly see the student's status for Screening, Progress Monitoring, and Diagnostic Interviews.



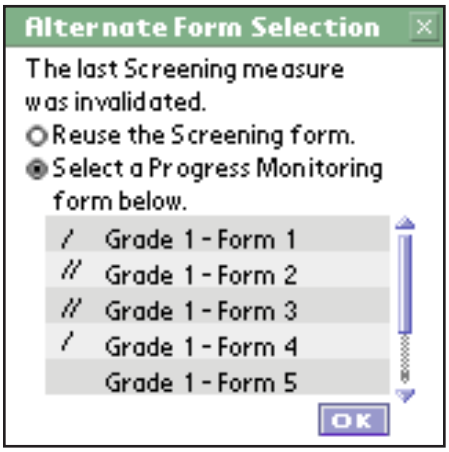
Screening

The Select Measure list displays only those measures that can be administered to the chosen child during the current time of year. You can quickly see how many measures have been completed by tapping the list. Results for completed measures for each time of year display at the bottom of the screen in alphabetical order.

1. Choose a measure from the Select Measure list.
2. Tap **Start** to begin administration.



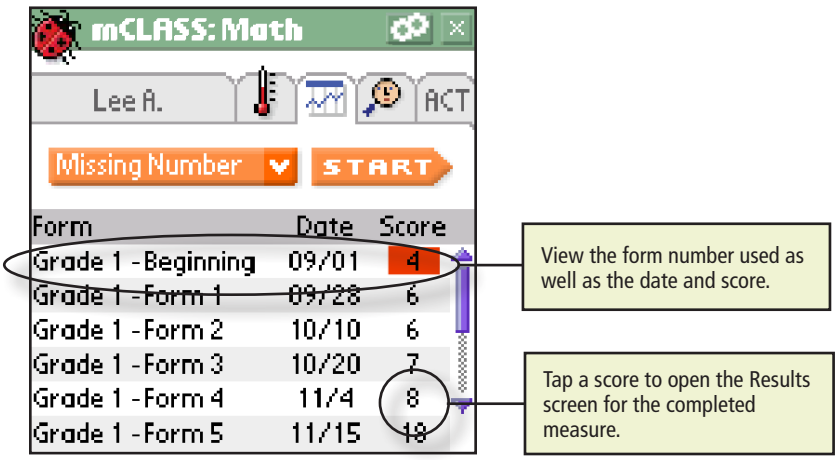
3. If the previous Screening measure was invalidated, choose to administer the Screening form again or to use a Progress Monitoring form. Forms that have been previously administered are indicated by tally marks.



Progress Monitoring

The Select Measure list displays only those measures that can be administered for the grade of the chosen child. Currently, mCLASS:Math recommends that at least one grade-appropriate measure be monitored every 14 days unless a Screening was administered less than 14 days earlier. After selecting a measure from the list, completed Progress Monitoring and Screening results for that measure display at the bottom of the screen, ordered by date. Screening results are color-coded according to risk level.

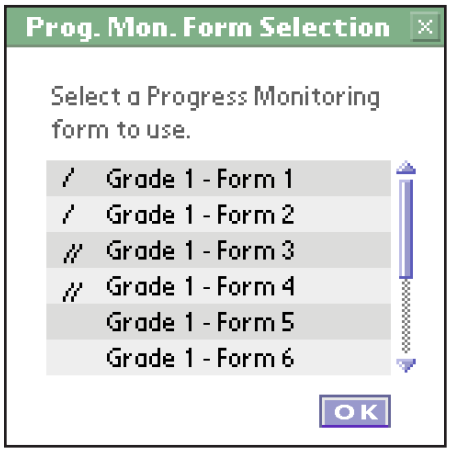
1. Choose a measure from the Select Measure list.
2. Tap **Start** to open the Progress Monitoring Form Selection screen.



As on the Screening section, because Benchmark Goals for grades 2 and higher have not been established, completed measures for those grades are in a solid gray box.

Gray – Risk Levels are not defined for this grade.

3. Forms that have been previously administered are indicated by tally marks. Avoid administering the same form multiple times to ensure accuracy. Choose a form by tapping the form name, then tap **OK**.

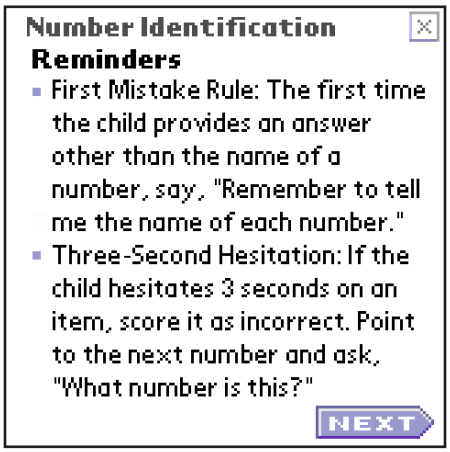


Common Features

Each measure has a number of similar features that guide you through administration; however, not all screens appear for each measure.

Reminders

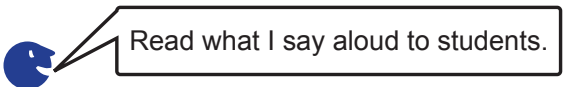
This screen appears before beginning administration of a measure. It guides you through acceptable prompts and reminds you of measure-specific scoring rules.



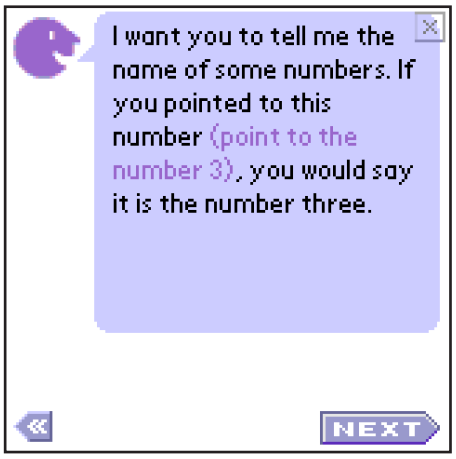
Tap **Next** to proceed to the Practice or Instructions screen, depending on the measure.

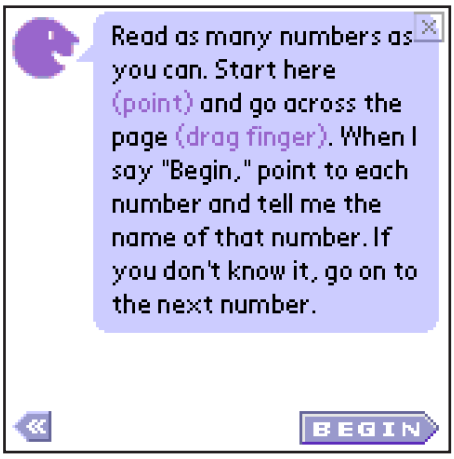
Practice and Instructions

Following the Reminders screen, a series of scripted instructions guide you through practice (where necessary) and administration of the assessment. The Practice screens help the child understand what is expected of him or her. The Instructions screens contain specific prompts to be read to the child. If you have chosen to administer in Spanish, the prompts appear in Spanish.



During practice, you may coach the child in any way necessary to ensure that he or she understands what is expected during administration. When you are certain that both you and the child understand the instructions, tap **Begin**.

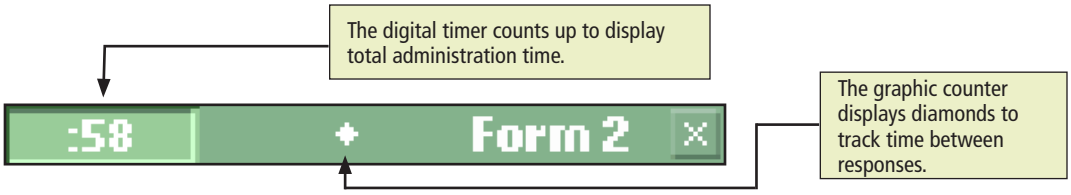




Timers

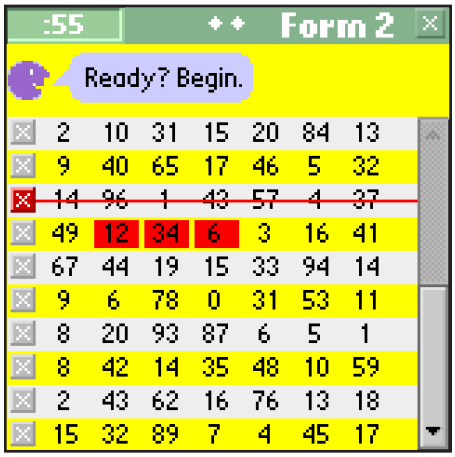
Many mCLASS:Math measures call for the assessor to track the time that passes between student responses. In Number Identification, for example, if the student hesitates for three seconds on a number the item is scored as incorrect to keep the assessment moving along.

The handheld provides two ways of monitoring time, the digital timer and the graphic counter.



The digital timer also operates as a **Start** and **Done** button at the beginning and end of a measure. (Administration of measures cannot be paused.)

Because the measures require assessment for only one minute, the handheld gives a visual warning when time is almost up. The assessment screen turns yellow when only five seconds remain.



At the end of the one-minute administration time, the screen returns to its original color. The timer flashes **Done** and the header turns purple. Tap **Done** to end the measure and review the results.

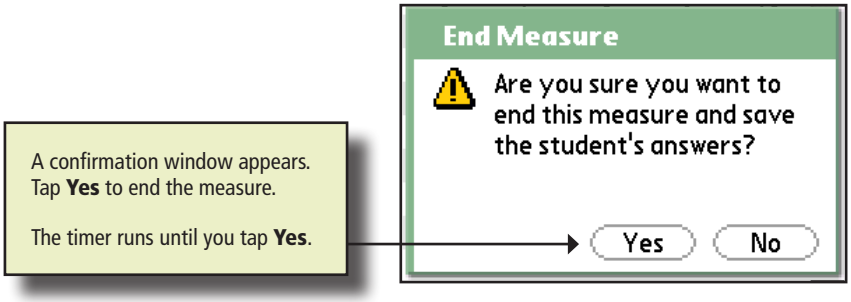
End Timed Measures Early

If you feel a student has reached his or her limit on a Screening or Progress Monitoring measure, you can tap the timer to end timed measures early. The student's score is not affected by ending a measure early.

1. During any timed mCLASS:Math measure, if a student stops responding or finishes early, tap the timer in the upper left corner.

2. You are prompted to confirm whether you want to end the measure. Tap **Yes** to end the measure and save the student's score. Tap **No** to continue assessing.

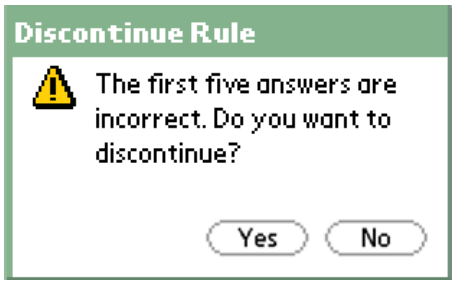
   Note: The timer continues to run until 60 seconds elapse or you tap **Yes**.



3. Drag the bracket to the last item attempted, and tap **Done** to end the measure. For Number Facts, which has no bracket, tap **Done** to end the measure.

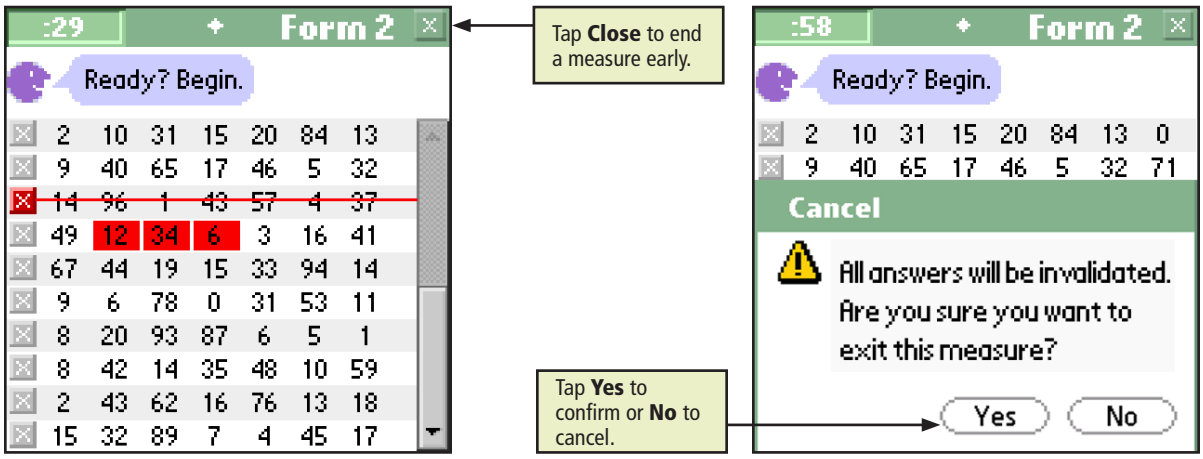
Discontinue Rule

If the child answers incorrectly on the first five consecutive items in any measure, tap **Yes** on the pop-up to stop or **No** to ignore the rule. If you discontinue, the Results screen opens displaying the child's score as 0; this is a valid, official score. If you choose to proceed, you will not have the choice to discontinue again.



Invalidating During Administration

If you choose to exit an incomplete measure, all answers will be discarded or invalidated.



If you do not wish to end a measure before it is completed, tap **No** on the Cancel confirmation box.

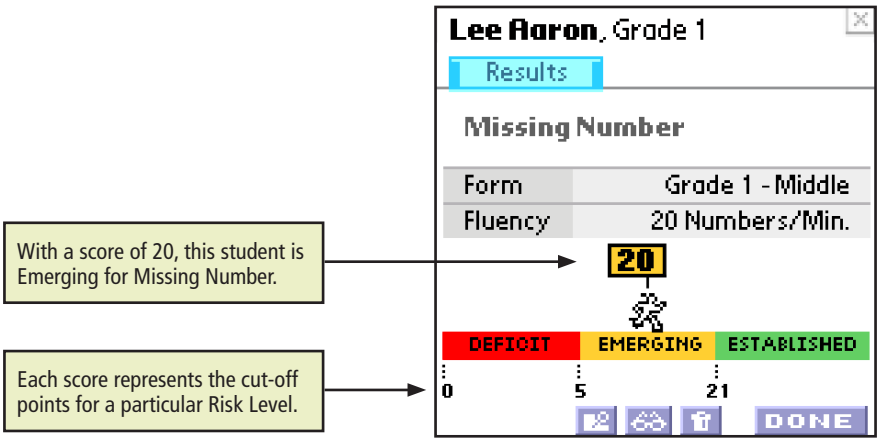
Results Screen

Interview results are only visible to those users with the appropriate access privileges. (If you believe you should have access to a result but do not, contact your technology coordinator or the Wireless Generation Customer Care center.) You can review the results on the handheld at any time after completion.

The fluency score is simply the number of correct responses the child provides in a minute. The graphic shows where students are in their mathematical development and only appears on the Screening Results screen.

From the Results screen, you can review answers, delete the measure, record notes, or go back to the Student Menu.

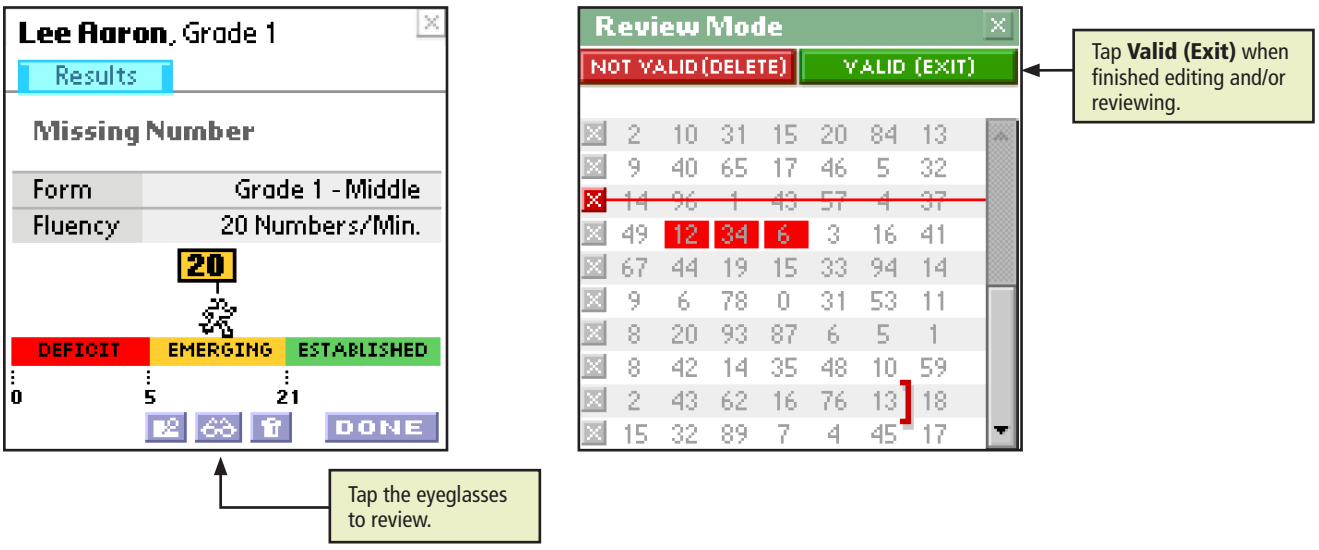
The Results screen has changed only for Screening scores; the Progress Monitoring Results screen remains the same as in the original mCLASS:Math User Guide. The Screening Results screen contains a graphical referent for seeing where students are in their mathematical skill development. The Running Man runs along a colored bar, showing which Risk Level students attained for a Screening measure as well as the exact score for that measure.



Review Mode

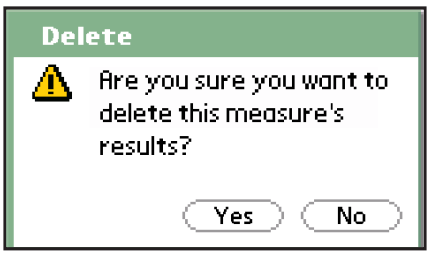
During administration of a measure, tap any answers at any time to mark them as incorrect.

After completing a measure, you may edit in Review Mode.



If there are many changes, you may want to invalidate the entire measure by tapping **Not Valid (Delete)**. If you are not the person who administered this measure, the **Not Valid (Delete)** and **Valid (Exit)** buttons remain inactive.

A message pops up to confirm whether you would like to delete the results.



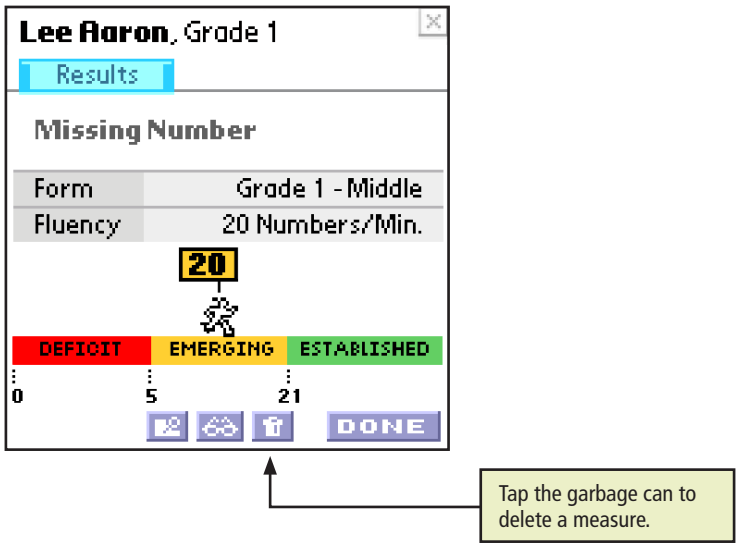
Tap **Yes** to return to the Results screen or **No** to continue in Review Mode.

Deleting

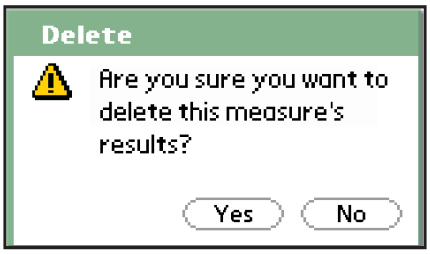
Once you have completed a measure, you may delete it. Only the assessor who administered the measure may delete it, though. Tap **Delete**, represented by a trash can, to do so.

An interview should always be invalidated, or deleted, when an interruption or mistake occurs that undermines the validity of the overall score. Examples include:

- Intercom announcements
- Fire drills
- Scoring errors that can't easily be corrected



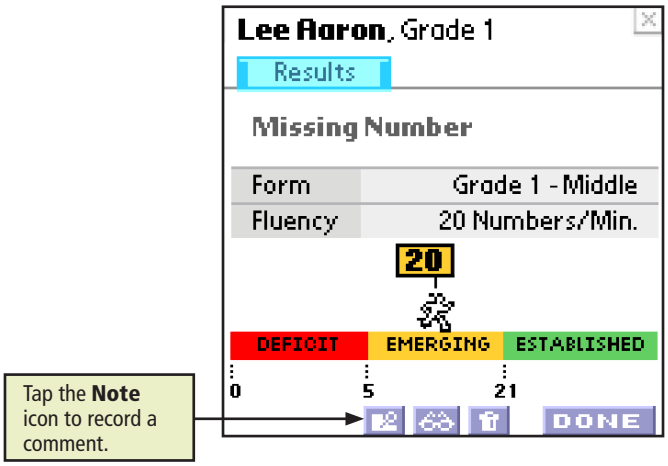
A message pops up to confirm deletion of the results.



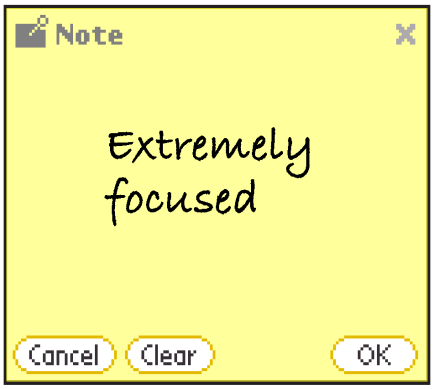
Tap **Yes** to return to the student's Screening or Progress Monitoring screen, depending on which one you are administering. Tap **No** to stay on the Results screen.

Notes

Tap the **Note** icon in the lower left of the Results screen to record notes. Use the stylus as a pen to annotate a completed measure.



Once you have written a note on the screen, tap **OK** to return to the Results screen. To erase what you wrote, tap **Clear**. To exit Notes without recording information, tap **Cancel**.



Sharing

If more than one person has assessed a student, the following rules apply:

- An assessor may view results for all students in his or her class.
- Only the assessor who administered the completed measure may make changes to it.
- Only the first completed and synced administration of a measure will be recorded as official for reporting purposes.
- If the first completed and synced measure is invalidated, the next completed and synced measure becomes official.

Counting

Kindergarten	First

In Counting, the child counts as high as he or she can in 60 seconds. The numbers 1–120 display on your handheld. While the child counts out loud, beginning at one, tap all numbers skipped or not read in order.

Purpose

This measure emphasizes the ability to say counting words, to count forward, and to know that the numbers from 20 to 100 and above are not simply for memorization, but can also be generated by a set of rules important to calculation.

Students make mistakes in predictable places as they learn and extend the counting sequence. The set of words between ten and twenty do not exactly follow the rules, and transitions between decades can be particularly challenging until students have learned the counting words and figured out the pattern.

Counting aloud is a necessary but not sufficient skill. Successful rote counting should not be mistaken for a mastery of numbers, but it is also true that lack of fluency in counting aloud is a clear indicator of difficulty.

Materials

None

Scoring Rules

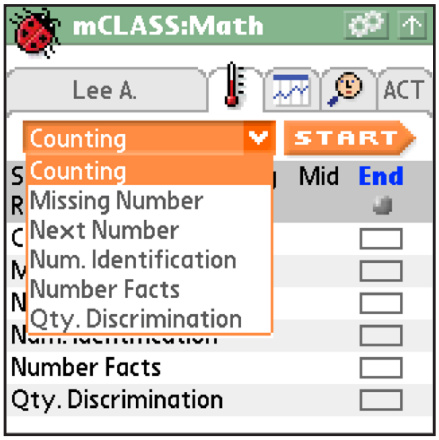
Articulation/Dialect Issues: The child is not penalized for imperfect pronunciation due to dialect, articulation, or second language interference.

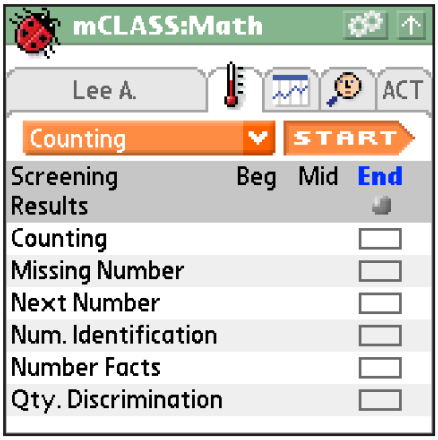
Encouragement Prompt: If the child does not begin counting, encourage him or her by saying, "One … two … three … Now you keep going."

Self-Corrections: Tap an item a second time if the child has self-corrected in a reasonable amount of time or if you have accidentally recorded an answer.

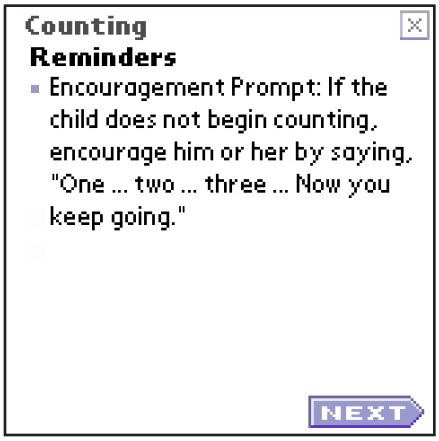
Administration

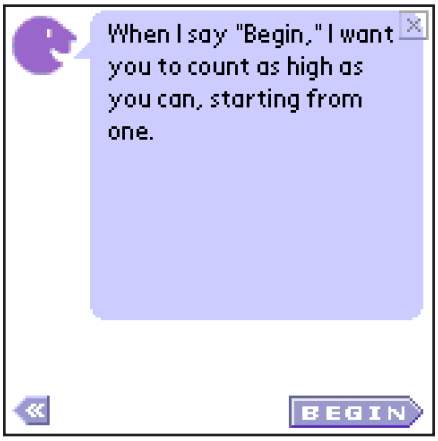
1. Choose **Counting** from the Select Measure list on the Student Menu, then tap **Start**.



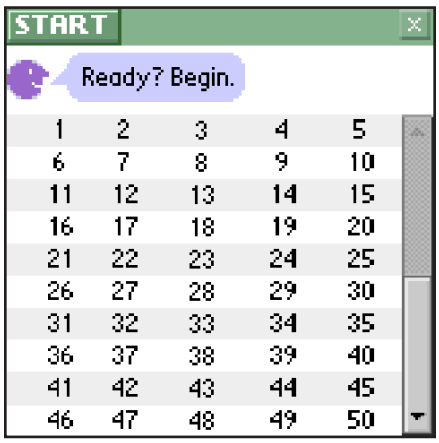


2. Read the Reminders and Instructions screens, reading all Mr. Say content aloud to the child.

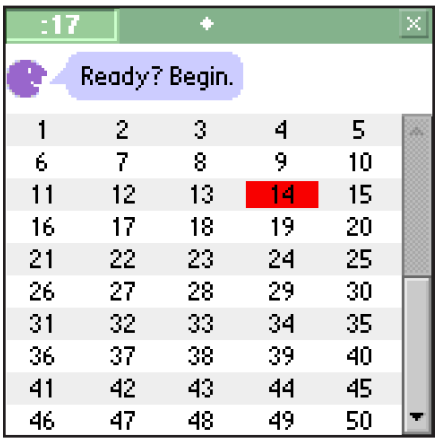




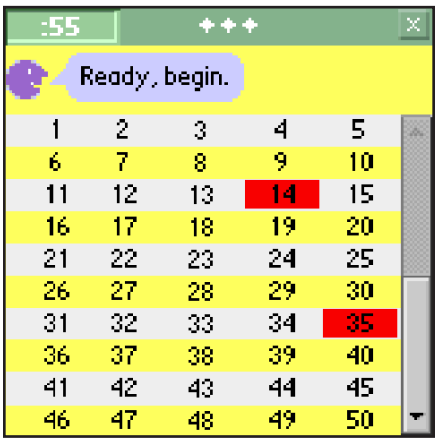
3. Once you are certain the child understands how to accomplish the measure's tasks, say, "Ready? Begin." Immediately tap **Start** when the child responds affirmatively.



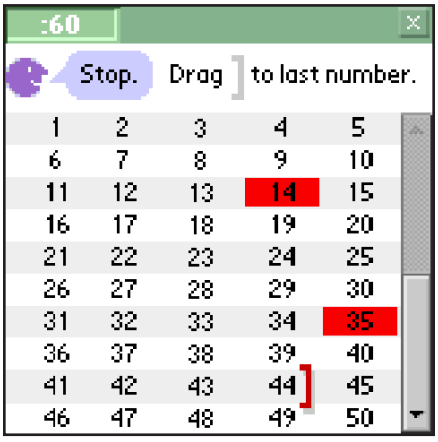
4. As the child counts as high as he or she can, tap the numbers said incorrectly or skipped entirely.



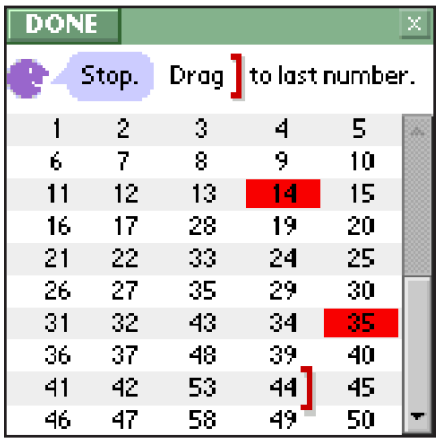
5. When the screen flashes, be prepared to stop the child if he or she hasn't already reached 100.



6. When time is up, tap and drag the bracket, placing it after the last number the child said.



7. When the timer flashes **Done**, tap it to view the results.



Risk Levels

Counting is a standardized measure that assesses a child's ability to say the counting words, to count forward, and to know that the numbers from 20 to 100 and above should not simply be remembered but can also be generated by a set of rules that govern calculation.

The End-of-Year Goal for Counting is 83 or more for kindergartners and 118 or more for first graders.

Counting Risk Levels by Grade and Assessment Period				
Grade	Assessment Period	Deficit (Red)	Emerging (Yellow)	Established (Green)
Kindergarten	Beginning	19 or less	20–59	60 or more *Benchmark Goal*
	Middle	29 or less	30–69	70 or more *Benchmark Goal*
	End	42 or less	43–82	83 or more *End-of-Year Goal*
Grade 1	Beginning	42 or less	43–82	83 or more *Benchmark Goal*
	Middle	49 or less	50–99	100 or more *Benchmark Goal*
	End	62 or less	63–117	118 or more *End-of-Year Goal*

Missing Number

Kindergarten	First

Missing Number is a 60-second measure that evaluates a student's recognition of basic number patterns and familiarity with printed numbers. There are 50 items on your handheld. You provide the child with the Missing Number visual items from the workbook that correspond to the screen on your handheld. The child should point to each series in each row and tell you what number is missing. Tap only the numbers the child identifies incorrectly or skips entirely.

Purpose

Students need to recognize basic number patterns and be familiar with printed numbers to develop number sense. To successfully answer these items, students must recognize the two printed symbols as representations of numbers, identify the number that would complete the sequence, and produce the name for that number. Students who can quickly and accurately identify which number is missing recognize and make use of a fundamental pattern within the number sequence. Students who proceed more slowly may have to go through a manual strategy to fill in the blank, perhaps counting from a known referent up to the numbers in question (for example, counting from one to six to answer what is missing in 5, __, 7). Other students may not yet grasp the relationships between numbers.

Materials

The Missing Number forms from the *Screening and Progress Monitoring Student Materials*

Scoring Rules

Articulation/Dialect Issues: The child is not penalized for imperfect pronunciation due to dialect, articulation, or second language interference.

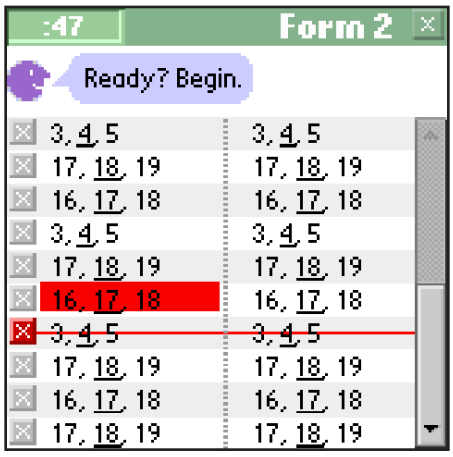
Discontinue Rule: You will be prompted to discontinue this measure if the child scores incorrect on the first five items.

First Mistake Rule: The first time the child reads the numbers but does not say the missing number, say, "Remember to tell me which number is missing."

Reading Order Prompt: If the child is obviously reading from right to left, instruct him or her to read left to right.

Self-Corrections: Tap an item a second time if the child has self-corrected in a reasonable amount of time or if you have accidentally recorded an answer.

Skipped Row: Tap the **X** at the beginning of any row a child skips. This does not affect scoring.

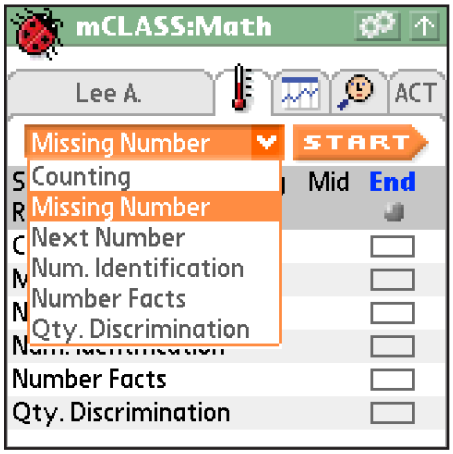


Three-Second Hesitation: If the child hesitates three seconds on an item, score it as incorrect. Point to the next series and ask, "What number is missing?"

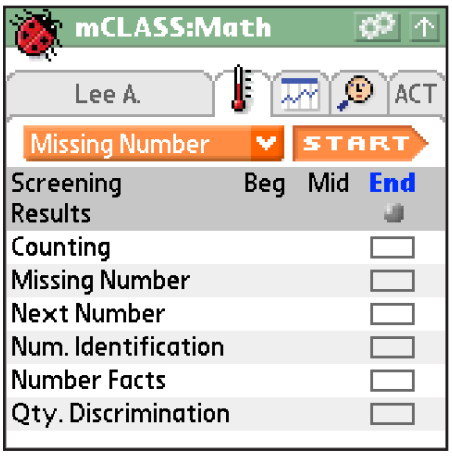
Written Answer Rule: Writing utensils should be cleared from the area before beginning this measure. If the child does write the answer, say, "Let's do this without a pencil." Point to the item again and ask, "What number is missing?"

Administration

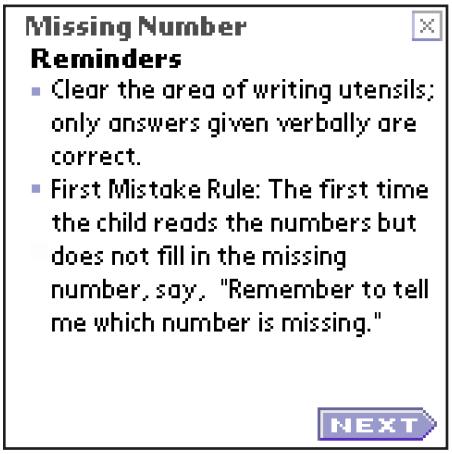
1. Choose **Missing Number** from the Select Measure list on the Student Menu.

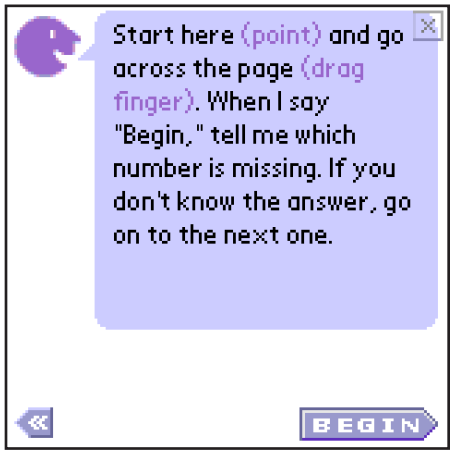


2. Verify that you have all necessary materials for the measure, then tap **Start**.

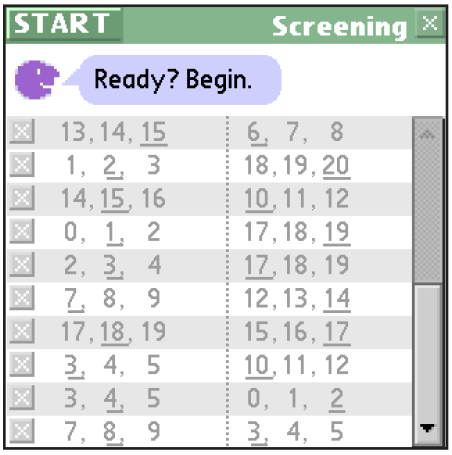


3. Read the Reminders screen and follow the Practice and Instructions screens, reading all Mr. Say content aloud to the child.

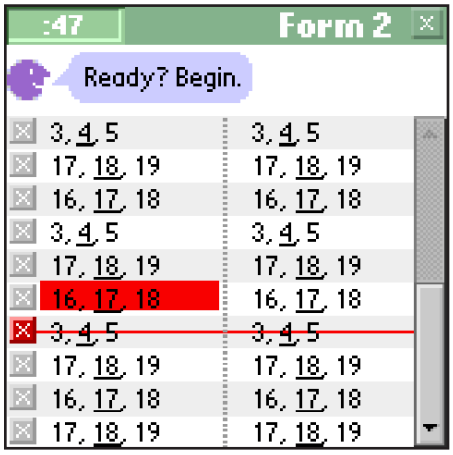




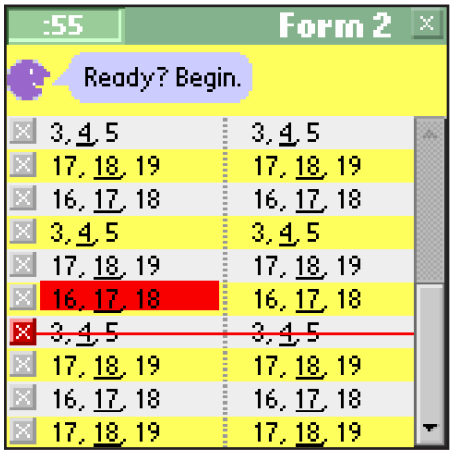
4. Once you are certain the child understands how to accomplish the measure's tasks, say, "Ready? Begin." Immediately tap **Start** when the child responds affirmatively.



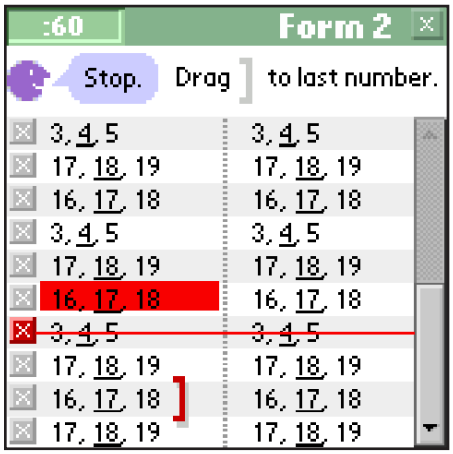
5. As the child identifies the numbers missing from the serial patterns across each row, tap the numbers that he or she identifies incorrectly or skips entirely.



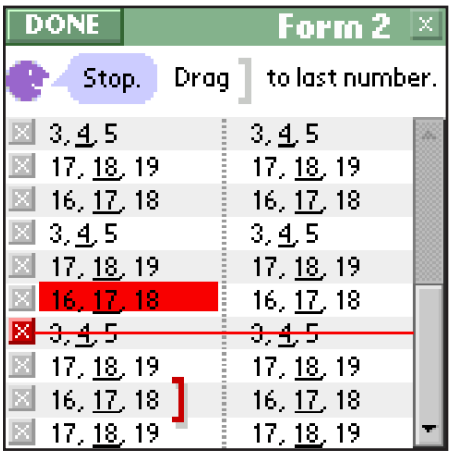
6. When the screen flashes, be prepared to stop the child if he or she hasn't already finished.



7. When time is up, tap and drag the bracket, placing it after the last number the child identified.



8. When the timer flashes **Done**, tap it to view the results.



Risk Levels

Missing Number evaluates a student's recognition of basic number patterns and familiarity with printed numbers as part of the ongoing development of number sense. Students who can quickly and accurately identify which number is missing recognize and make use of a fundamental pattern within the number sequence.

The End-of-Year Goal for Missing Number is 13 or more for kindergartners and 23 or more for first graders.

Missing Number Risk Levels by Grade and Assessment Period				
Grade	Assessment Period	Deficit (Red)	Emerging (Yellow)	Established (Green)
Kindergarten	Beginning	0	1–6	7 or more *Benchmark Goal*
	Middle	2 or less	3–9	10 or more *Benchmark Goal*
	End	3 or less	4–12	13 or more *End-of-Year Goal*
Grade 1	Beginning	4 or less	5–19	20 or more *Benchmark Goal*
	Middle	5 or less	6–20	21 or more *Benchmark Goal*
	End	7 or less	8–22	23 or more *End-of-Year Goal*

Next Number

Kindergarten	First

In Next Number, the assessor says a number and the child answers by providing the number that comes after it. There are 84 items on your handheld. Tap only the numbers the child identifies incorrectly or skips entirely. This measure lasts 60 seconds.

Purpose

Students should have meaningful referents for numbers and should not rely on rote understanding. Fluidly counting or moving up by one is akin to adding one to a number, suggesting that it is a strong precursor to adding numbers.

Students who quickly and accurately produce the next number likely have a strong understanding of the relationship and order of numbers. They may even have a mental number line on which they can quickly move. Other students may have to rerun the counting sequence in their head before giving an answer (for example, counting up from 30 to determine what comes after 36). These children may remember the words only when said in sequence but lack full comprehension of the words' meaning.

Materials

None

Scoring Rules

Articulation/Dialect Issues: The child is not penalized for imperfect pronunciation due to dialect, articulation, or second language interference.

Discontinue Rule: You will be prompted to discontinue this measure if the child scores incorrect on the first five items.

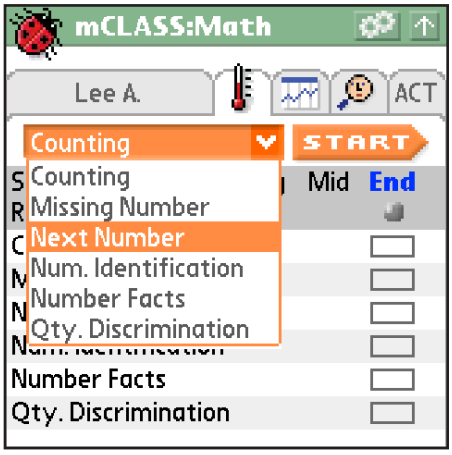
First Mistake Rule: The first time the child repeats the number, say, "Remember to tell me the number that comes after the number I say."

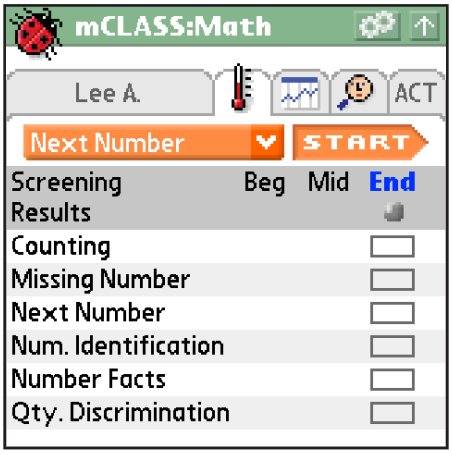
Self-Corrections: Tap an item a second time if the child has self-corrected in a reasonable amount of time or if you have accidentally recorded an answer.

Three-Second Hesitation: If the child hesitates 3 seconds on an item, score it as incorrect and move on by asking, "OK, what comes after [x]?"

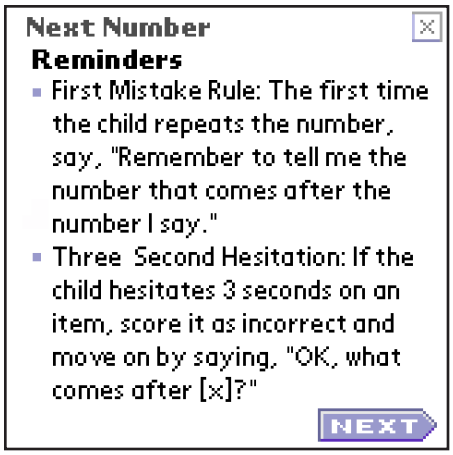
Administration

1. Choose **Next Number** from the Select Measure list on the Student Menu, then tap **Start**.

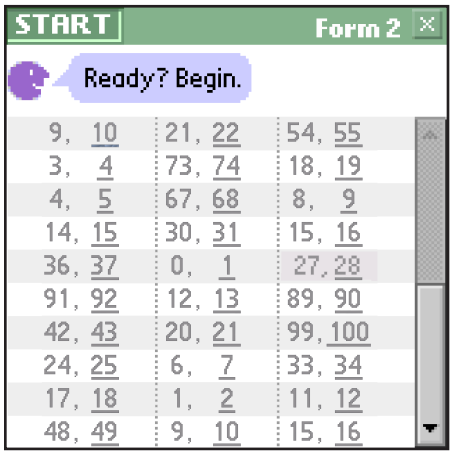




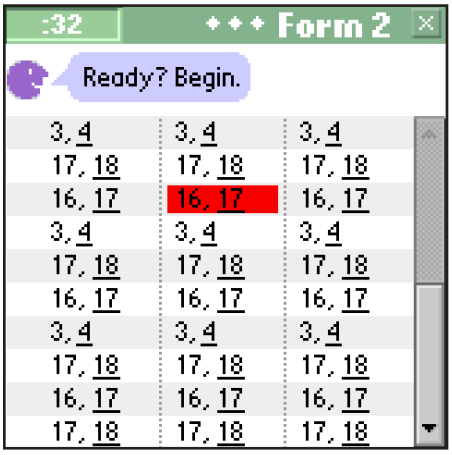
2. Read the Reminders screen and follow the Practice and Instructions screens, reading all Mr. Say content aloud to the child.



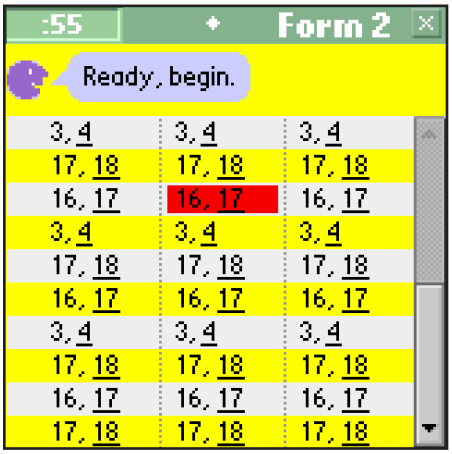
3. Once you are certain the child understands how to accomplish the measure's tasks, say, "Ready? Begin." Immediately tap **Start** when the child responds affirmatively.



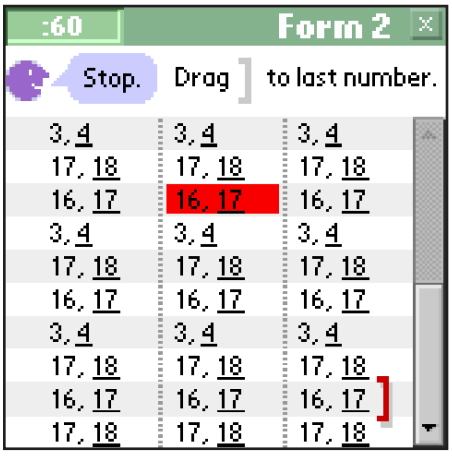
4. Tell the child the number that is not underlined. As the child responds with the number that follows, tap any numbers he or she identifies incorrectly.



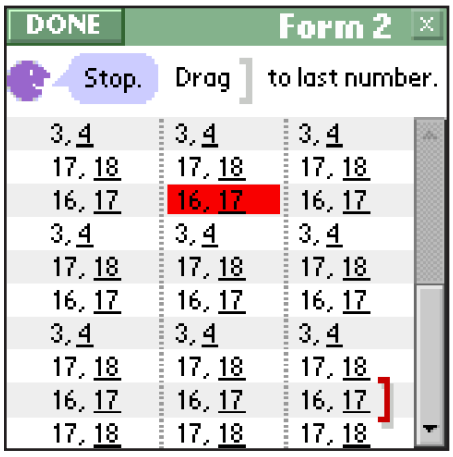
5. When the screen flashes, be prepared to stop the child if he or she hasn't already finished.



6. When time is up, tap and drag the bracket, placing it after the last number the child identified.



7. When the timer flashes **Done**, tap it to view the results.



Risk Levels

Next Number is a measure where the assessor says a number and the child answers by providing the number that comes after it. Strong mathematicians have meaningful referents for numbers and do not rely on rote understanding and strategies. Students who quickly and accurately produce the next number likely have a strong understanding of the relationship and order of numbers.

The End-of-Year Goal for Next Number is 23 or more. This measure is not required for kindergartners.

Next Number Risk Levels by Grade and Assessment Period				
Grade	Assessment Period	Deficit (Red)	Emerging (Yellow)	Established (Green)
Grade 1	Beginning	8 or less	9–16	17 or more *Benchmark Goal*
	Middle	9 or less	10–19	20 or more *Benchmark Goal*
	End	10 or less	11–22	23 or more *End-of-Year Goal*

Number Facts

Kindergarten	First

Number Facts is a 60-second measure that evaluates a child's knowledge of basic arithmetic. There are 40 problems on your handheld. You ask the child the problems and tap the **Correct Answer** button or **Incorrect**, depending on the child's answer.

Purpose

Quick retrieval of the basic number facts, or combinations, is fundamentally important and may predict achievement. From a practical point of view, quick retrieval means that children get the answer quickly and do not have to expend much mental energy on calculation. Quick retrieval may result from rote memory, from fluency with rapid counting, or from an understanding of basic principles such as the commutativity of addition.

Materials

None

Scoring Rules

Articulation/Dialect Issues: The child is not penalized for imperfect pronunciation due to dialect, articulation, or second language interference.

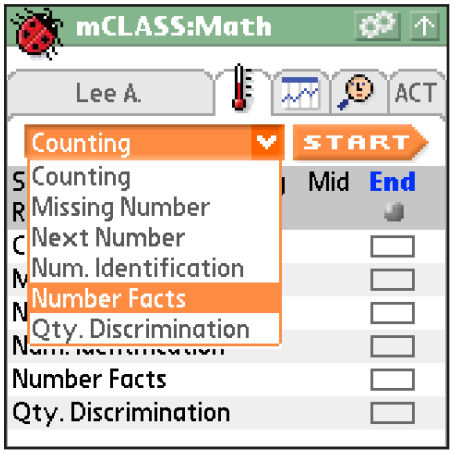
Discontinue Rule: You will be prompted to discontinue this measure if the child scores incorrect on the first five items.

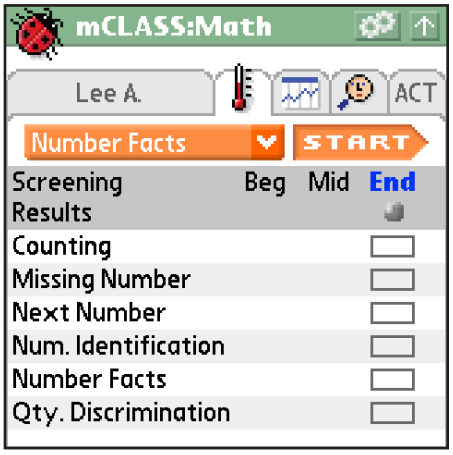
Self-Corrections: Tap an item a second time if the child has self-corrected in a reasonable amount of time or if you have accidentally recorded an answer.

Three-Second Hesitation: If the child hesitates for three seconds and does not appear to be working out the problem, score it as incorrect and present the next item.

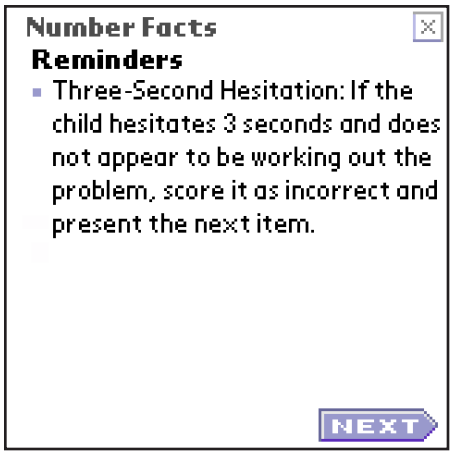
Administration

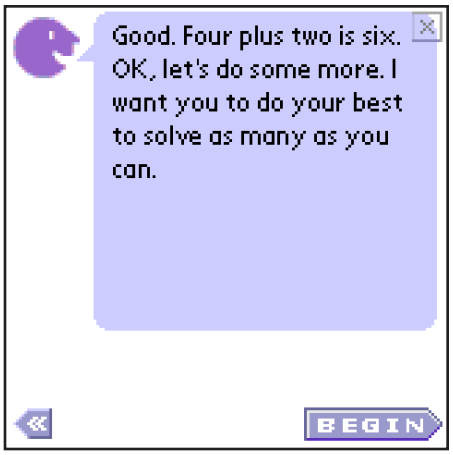
1. Choose **Number Facts** from the Select Measure list on the Student Menu, then tap **Start**.



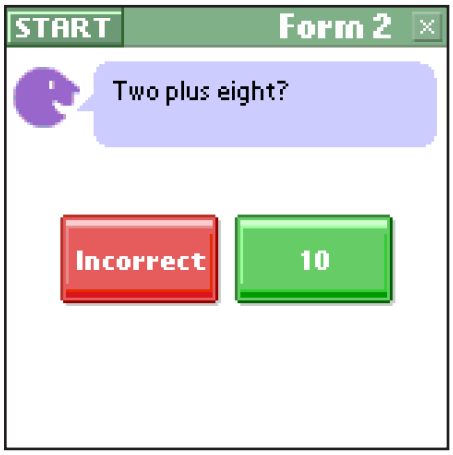


2. Read the Reminders screen and follow the Practice and Instructions screens, reading all Mr. Say content aloud to the child.

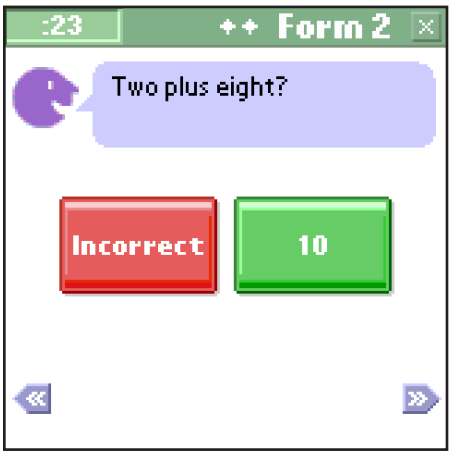




3. Once you are certain the child understands how to accomplish the measure's tasks, ask the problem, then tap **Start**.

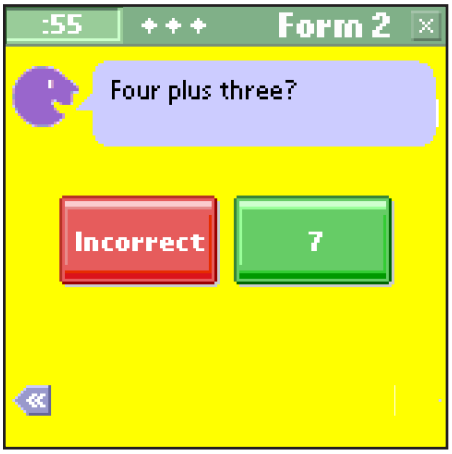


4. Tap **Incorrect** or the **Correct Answer** button, depending on the child's answers.



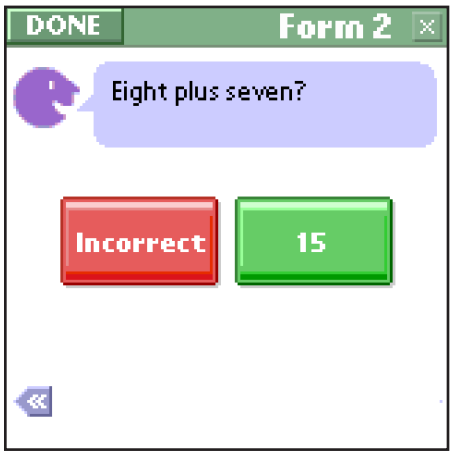
- Once you select an answer, the next question appears.
- A forward arrow appears only if you go back to change an answer. Tap the back arrow to do so.

5. The screen flashes as a warning when only 5 seconds remain.



6. When the timer flashes **Done**, ask the final problem on the screen, if you have not already, and allow the child to answer. Tap **Incorrect** or the **Correct Answer** button, depending on the child's answer.

7. Tap **Done** to view the results.



Risk Levels

Number Facts is a measure that evaluates a child's knowledge of basic arithmetic. Quickly retrieving basic number facts, or combinations, means the student does not expend much mental energy on calculation.

The End-of-Year Goal for Number Facts is 11 or more. This measure is not required for kindergartners.

Number Facts Risk Levels by Grade and Assessment Period				
Grade	Assessment Period	Deficit (Red)	Emerging (Yellow)	Established (Green)
Grade 1	Beginning	1 or less	2–5	6 or more *Benchmark Goal*
	Middle	4 or less	5–7	8 or more *Benchmark Goal*
	End	6 or less	7–10	11 or more *End-of-Year Goal*

Number Identification

Kindergarten	First

Number Identification is a 60-second measure that gauges a child's ability to identify numerals. There will be 70 numbers on your handheld. You provide the child with the Number Identification visual items from the workbook that correspond to the screen on your handheld. Tap only the numbers the child identifies incorrectly or skips entirely.

Purpose

An understanding of the written symbols that represent numbers is a skill on which all of written mathematics depends. Successfully reading numerals containing two or more digits also requires an understanding of the relationships of various digits. Children must recognize multi-digit numbers as composites of ones and tens (i.e., *21* not as *two one*, but *twenty-one*). Performing well on this measure demonstrates familiarity and fluency with a wide range of one- and two-digit numbers.

Materials

The Number Identification forms from the *Screening and Progress Monitoring Student Materials*

Scoring Rules

Articulation/Dialect Issues: The child is not penalized for imperfect pronunciation due to dialect, articulation, or second language interference.

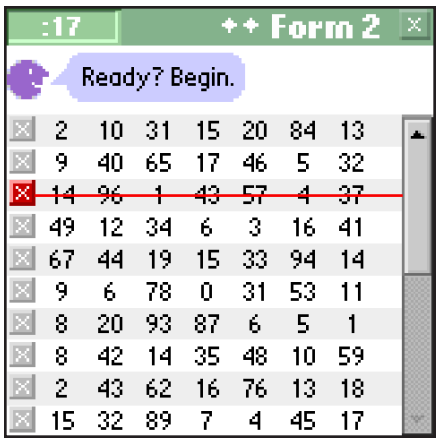
Discontinue Rule: You will be prompted to discontinue this measure if the child scores incorrect on the first five items.

First Mistake Rule: The first time the child provides an answer other than the name of a number, say, "Remember to tell me the name of each number."

Reading Order Prompt: If the child is obviously reading from right to left, instruct him or her to read left to right.

Self-Corrections: Tap an item a second time if the child has self-corrected in a reasonable amount of time or if you have accidentally recorded an answer.

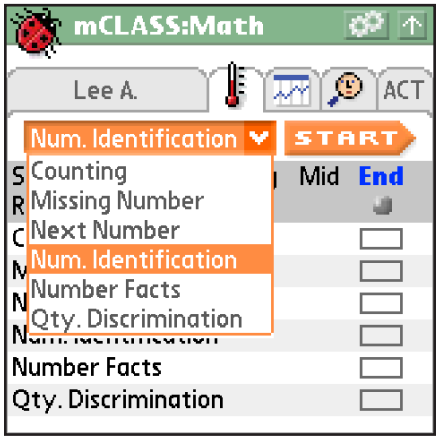
Skipped Row: Tap the **X** at the beginning of any row a child skips, it will not affect scoring.



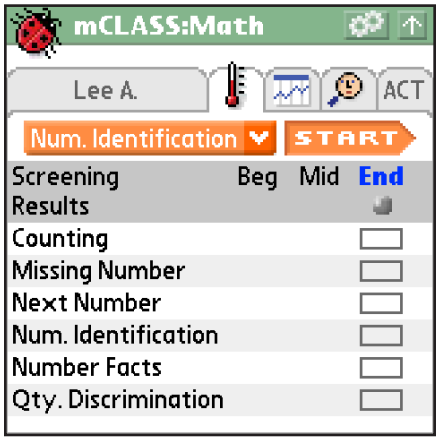
Three-Second Hesitation: If the child hesitates three seconds on an item, score it as incorrect. Point to the next number and ask, "What number is this?"

Administration

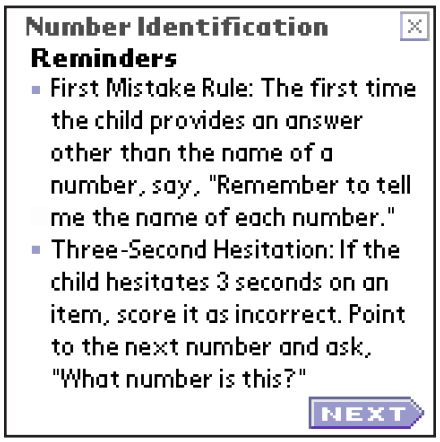
1. Choose **Number Identification** from the Select Measure list on the Student Menu.

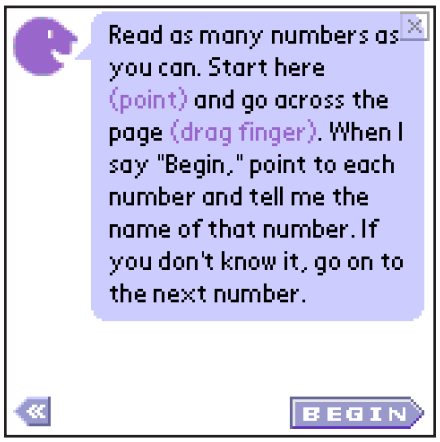


2. Verify that you have all necessary materials for the measure, then tap **Start**.

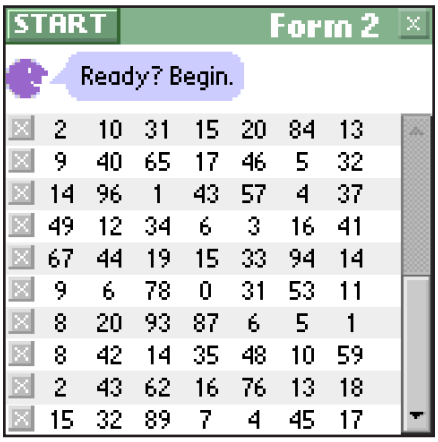


3. Read the Reminders screen and follow the Practice and Instructions screens, reading all Mr. Say content aloud to the child.

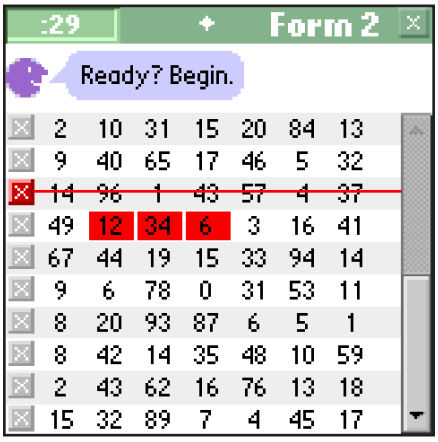




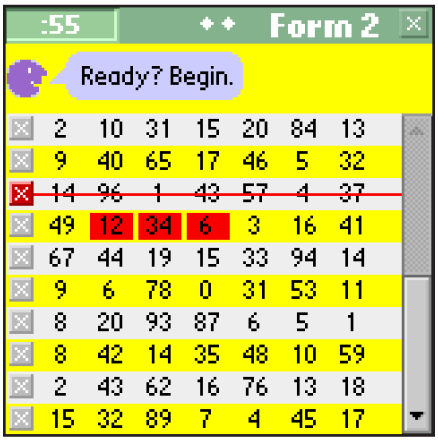
4. Once you are certain the child understands how to accomplish the measure's tasks, say, "Ready? Begin." Immediately tap **Start** when the child responds affirmatively.



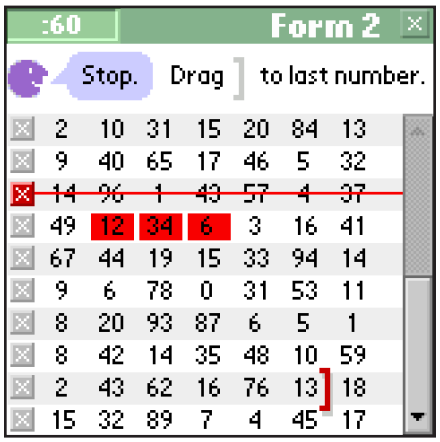
5. As the child reads from left to right across each row, tap the numbers that he or she identifies incorrectly or skips entirely. Watch the diamond counter for three-second hesitations.



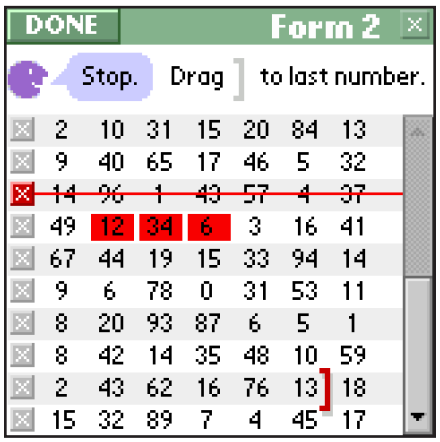
6. When the screen flashes, be prepared to stop the child if he or she has not already finished.



7. When time is up, tap and drag the bracket, placing it after the last number the child identified.



8. When the timer flashes **Done**, tap it to view the results.



Risk Levels

Number Identification is a measure that gauges a child's ability to identify numerals. Successfully reading numerals containing two or more digits also requires an understanding of the relationship among the various digits, so performing well on this measure demonstrates familiarity and fluency.

The End-of-Year Goal for Number Identification is 31 or more for kindergartners and 65 or more for first graders.

Number Identification Risk Levels by Grade and Assessment Period				
Grade	Assessment Period	Deficit (Red)	Emerging (Yellow)	Established (Green)
Kindergarten	Beginning	2 or less	3–19	20 or more *Benchmark Goal*
	Middle	8 or less	9–24	25 or more *Benchmark Goal*
	End	13 or less	14–30	31 or more *End-of-Year Goal*
Grade 1	Beginning	13 or less	14–43	44 or more *Benchmark Goal*
	Middle	18 or less	19–53	54 or more *Benchmark Goal*
	End	23 or less	24–64	65 or more *End-of-Year Goal*

Quantity Discrimination

Kindergarten	First

Quantity Discrimination is a 60-second measure that identifies a child's ability to comprehend the quantitative value of a number. There are 60 sets of numbers arranged on your handheld's screen and on the Quantity Discrimination visual items from the Workbook. You provide the child with the Quantity Discrimination visual items that correspond to the screen on your handheld. The child should identify the number in the pair with the highest value. Tap only the pairs the student identifies incorrectly or skips entirely.

Purpose

Comparing the magnitude of numbers is a fundamental number concept. Within a given item, a student must recognize the written numerals and understand that the *8* represents something that can be more than or bigger than that which is represented by the *2*. Understanding quantity is the first step to dealing with the fundamental questions of "How much?" It has also been shown to be one of the strongest predictors of mathematical performance.

Materials

The Quantity Discrimination forms from the *Screening and Progress Monitoring Student Materials*

Scoring Rules

Articulation/Dialect Issues: The child is not penalized for imperfect pronunciation due to dialect, articulation, or second language interference.

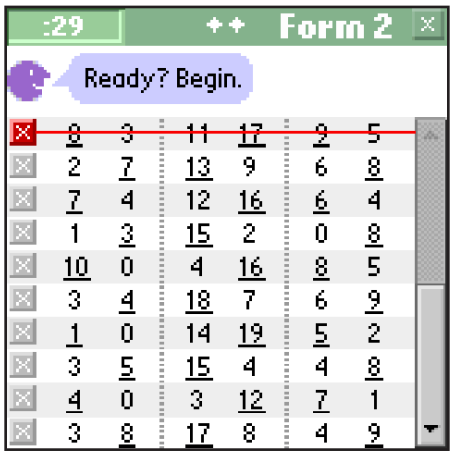
Discontinue Rule: You will be prompted to discontinue this measure if the child scores incorrect on the first five items.

First Mistake Rule: The first time the child reads both numbers, say, "Remember to tell me which number is bigger."

Point or Say Rule: The child is correct whether he or she points to or says the correct answer.

Self-Corrections: Tap an item a second time if the child has self-corrected in a reasonable amount of time or if you have accidentally recorded an answer.

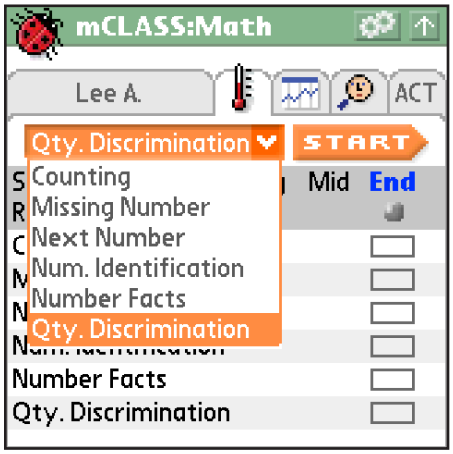
Skipped Row: Tap the **X** at the beginning of any row a child skips, it will not affect scoring.



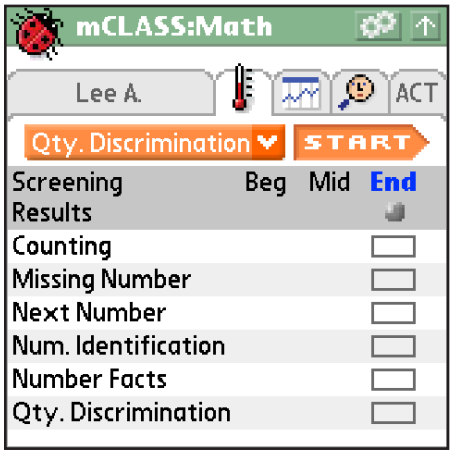
Three-Second Hesitation: If the child hesitates 3 seconds on an item, score it as incorrect. Point to the next pair and ask, "Which is bigger?"

Administration

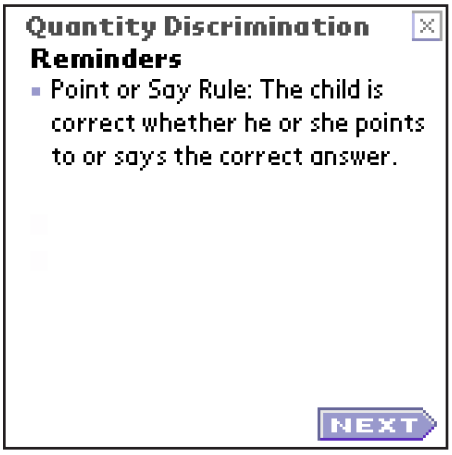
1. Choose **Quantity Discrimination** from the Select Measure list on the Student Menu.

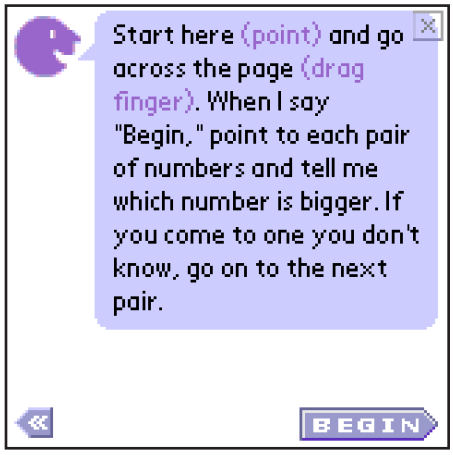


2. Verify that you have all necessary materials for the measure, then tap **Start**.

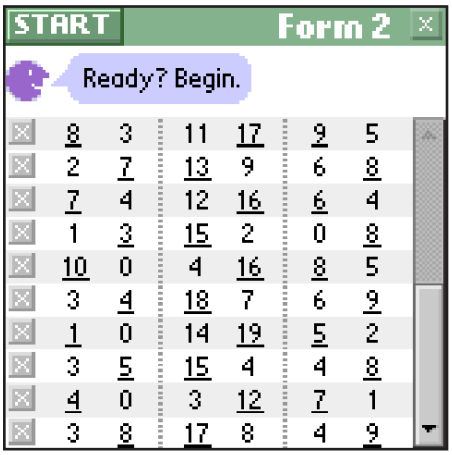


3. Read the Reminders screen and follow the Practice and Instructions screens, reading all Mr. Say content aloud to the child.

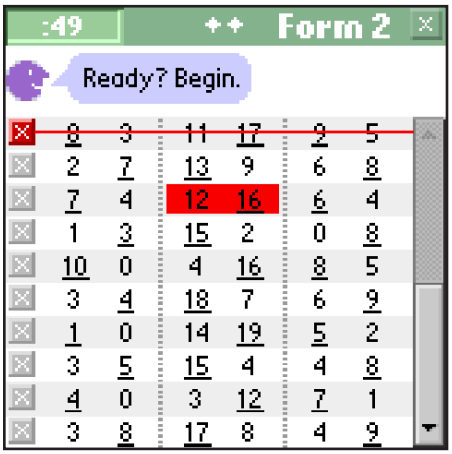




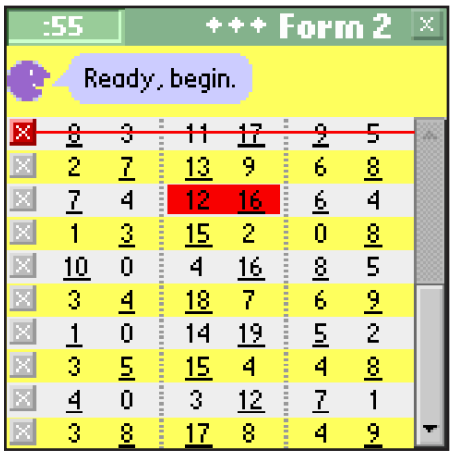
4. Once you are certain the child understands how to accomplish the measure's tasks, say, "Ready? Begin." Immediately tap **Start** when the child responds affirmatively.



5. As the child discerns the higher quantity number in each pair across the rows, tap the numbers that he or she identifies incorrectly or skips entirely.

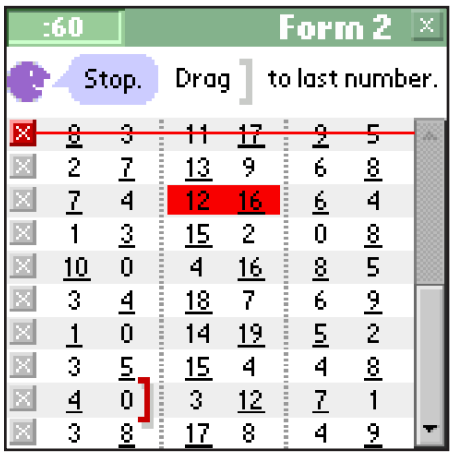


6. When the screen flashes, be prepared to stop the child if he or she has not already finished.



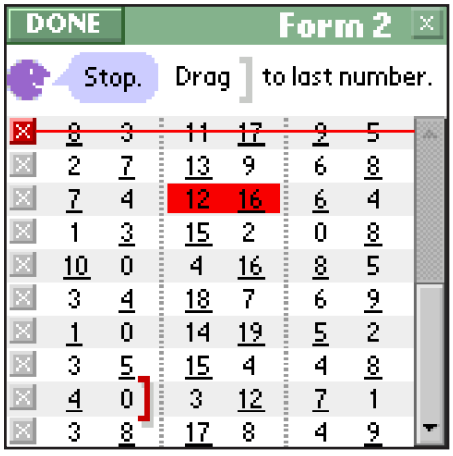
8	3	11	17	9	5
2	7	13	9	6	8
7	4	12	16	6	4
1	3	15	2	0	8
10	0	4	16	8	5
3	4	18	7	6	9
1	0	14	19	5	2
3	5	15	4	4	8
4	0	3	12	7	1
3	8	17	8	4	9

7. When time is up, tap and drag the bracket, placing it after the last number the child identified.



8	3	11	17	9	5
2	7	13	9	6	8
7	4	12	16	6	4
1	3	15	2	0	8
10	0	4	16	8	5
3	4	18	7	6	9
1	0	14	19	5	2
3	5	15	4	4	8
4	0	3	12	7	1
3	8	17	8	4	9

8. When the timer flashes **Done**, tap it to view the results.



8	3	11	17	9	5
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10	0	4	16	8	5
3	4	18	7	6	9
1	0	14	19	5	2
3	5	15	4	4	8
4	0	3	12	7	1
3	8	17	8	4	9

Risk Levels

Quantity Discrimination is a measure that determines a child's ability to comprehend the quantitative value of a number. The child identifies the number in the pair with the highest value.

The End-of-Year Goal for Quantity Discrimination is 25 or more for kindergartners and 40 or more for first graders.

Quantity Discrimination Risk Levels by Grade and Assessment Period				
Grade	Assessment Period	Deficit (Red)	Emerging (Yellow)	Established (Green)
Kindergarten	Beginning	4 or less	5–19	20 or more *Benchmark Goal*
	Middle	6 or less	7–22	23 or more *Benchmark Goal*
	End	8 or less	9–24	25 or more *End-of-Year Goal*
Grade 1	Beginning	14 or less	15–29	30 or more *Benchmark Goal*
	Middle	16 or less	17–34	35 or more *Benchmark Goal*
	End	19 or less	20–39	40 or more *End-of-Year Goal*

Activities

As is the case with completed Diagnostic Interviews, completed Screening measures map assessment data to specific instructional activities. These activities still fall under one of the five skill areas of mathematics defined in Diagnostic Interviews: Counting, Addition, Subtraction, Multiplication, and Written. In Screening, though, the particular activities advised are also sensitive to the student's Risk Level on each measure.

Kindergarten – Beginning of Year			
	Deficit	Emerging	Established
Counting	Count to 20 (#1) Catch My Mistake (#4)	Count to 20 (#1) Number After (#5) Number Before (#6) Count Backward (#7)	Count to 100 (#2) Count Backward (#7) Count by Tens from 10 (#8)
Missing Number	Count to 20 (#1) Catch My Mistake (#4)	Count to 20 (#1) Number After (#5) Number Before (#6)	Count to 100 (#2) Number After (#5) Number Before (#6) Count Backward (#7)
Number Identification	Count to 20 (#10) Write One-Digit Numerals (#61)	Write Two-Digit Numerals (#63)	Write Three-Digit Numerals (#64) Identify Three-Digit Numerals (#67)
Quantity Discrimination	Count to 20 (#1) Compare Magnitude Dots (#17)	Compare Magnitude (#3)	Create & Identify Groups of 10 (#69)

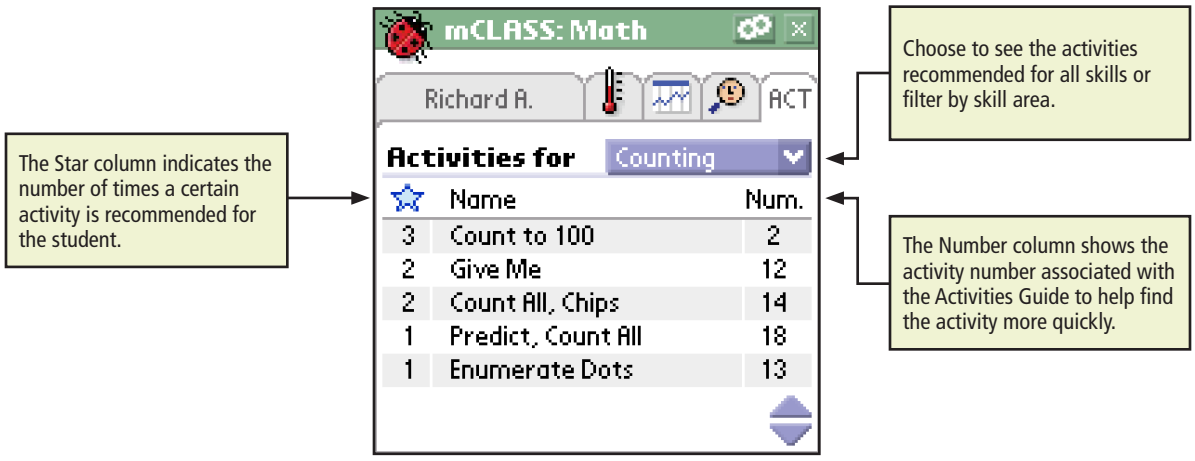
Kindergarten – Middle and End of Year			
	Deficit	Emerging	Established
Counting	Count Backward (#7) Give Me (#12)	Count to 100 (#2) Count by Tens from 10 (#8)	Count by Tens, Running Start (#9) Count Backward by Tens (#45)
Missing Number	Number After (#5) Number Before (#6)	Count to 100 (#2) Count Backward (#7)	Count to 100 (#2) Number After (#5) Number Before (#6) Count Backward (#7)

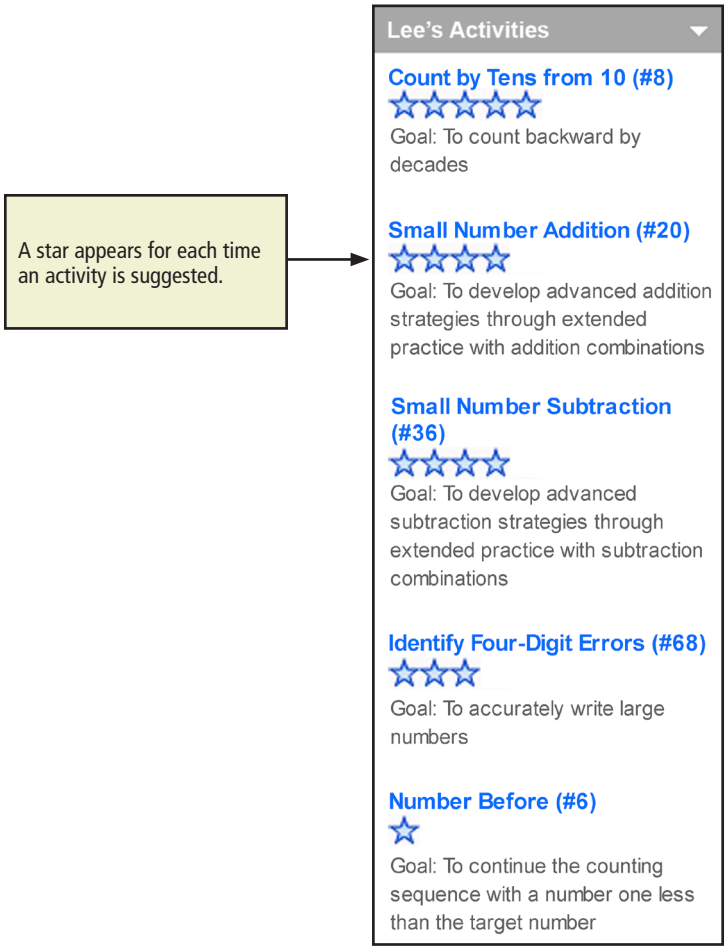
Kindergarten – Middle and End of Year			
	Deficit	Emerging	Established
Number Identification	Identify One-Digit Errors (#62)	Identify Two-Digit Errors (#66)	Write Three-Digit Numerals (#64) Identify Three-Digit Errors (#67)
Quantity Discrimination	Compare Magnitude (#3)	Create & Identify Groups of 10 (#69)	Create & Identify Groups of 10 (#69)

Grade 1 – Beginning of Year			
	Deficit	Emerging	Established
Counting	Count to 20 (#1) Catch My Mistake (#4) Number After (#5)	Count to 100 (#2) Number After (#5) Number Before (#6)	Count to 100 (#2) Count Backward (#7) Count by Tens, Running Start (#9)
Missing Number	Count to 20 (#1) Catch My Mistake (#4)	Count to 100 (#2) Number After (#5) Number Before (#6)	Count by Tens, Running Start (#9)
Next Number	Count to 20 (#1) Catch My Mistake (#4) Number After (#5) Number Before (#6) Count to 100 (#2)	Count to 100 (#2) Number After (#5) Number Before (#6) Count Backward (#7)	Count to 100 (#2) Number After (#5) Number Before (#6) Count Backward (#7)
Number Facts	Count to 20 (#1) Add by Counting All, Chips (#14) Separate From, Chips (#33)	Small Number Addition, Chips (#19) Small Number Subtraction, Chips (#35)	Adding & the Zero Rule (#23) Adding & the Order Rule (#25) Subtracting & the Zero Rule (#37)
Number Identification	Count to 20 (#1) Write One-Digit Numerals (#61)	Write Two-Digit Numerals (#63)	Write Three-Digit Numerals (#64) Identify Three-Digit Errors (#67)
Quantity Discrimination	Count to 20 (#1) Compare Magnitude Dots (#17)	Compare Magnitude (#3)	Create & Identify Groups of 10 (#69)

Grade 1 – Middle and End of Year			
	Deficit	Emerging	Established
Counting	Count to 100 (#2) Give Me (#12)	Count Backward (#7) Count by Tens from 10 (#8)	Count Backward by Tens (#45)
Missing Number	Count to 100 (#2) Number After (#5) Number Before (#6)	Count by Tens from 10 (#8)	Count by Tens, Running Start (#9)
Next Number	Count to 20 (#1) Catch My Mistake (#4) Number After (#5) Number Before (#6) Count to 100 (#2)	Count to 100 (#2) Number After (#5) Number Before (#6) Count Backward (#7)	Count to 100 (#2) Number After (#5) Number Before (#6) Count Backward (#7)
Number Facts	Predict, Count All (#18) Predict, Separate From, Chips (#34)	Small Number Addition (#20) Small Number Subtraction (#36)	Find the Same Number Rule (#39)
Number Identification	Identify One-Digit Errors (#62)	Identify Two-Digit Errors (#66)	Identify Four-Digit Errors (#68)
Quantity Discrimination	Compare Magnitude (#3)	Create & Identify Groups of 10 (#69)	Create & Identify Groups of 10 (#69)

All recommended activities, whether the source of the recommendation was a Diagnostic Interview or a Screening, show on the ACT section of the Student Menu. Each time an activity is recommended, it receives a star. Activities that are highly recommended, or have the most stars, appear closer to the top of the list. These stars also appear on the Web in the Activities section; however, on the Web, only the top five are visible.





The full details of each of these activities, including any necessary blackline masters, are printed in the *Activities Guide* available with the mCLASS:Math kit.

The mCLASS® Web Site

The secure mCLASS:Home Web site provides password-protected access to class and student reports of assessments conducted on the handheld. Over the Internet, results can only be viewed, not edited or deleted.

Results for your students only appear on the mCLASS Web site when you have:

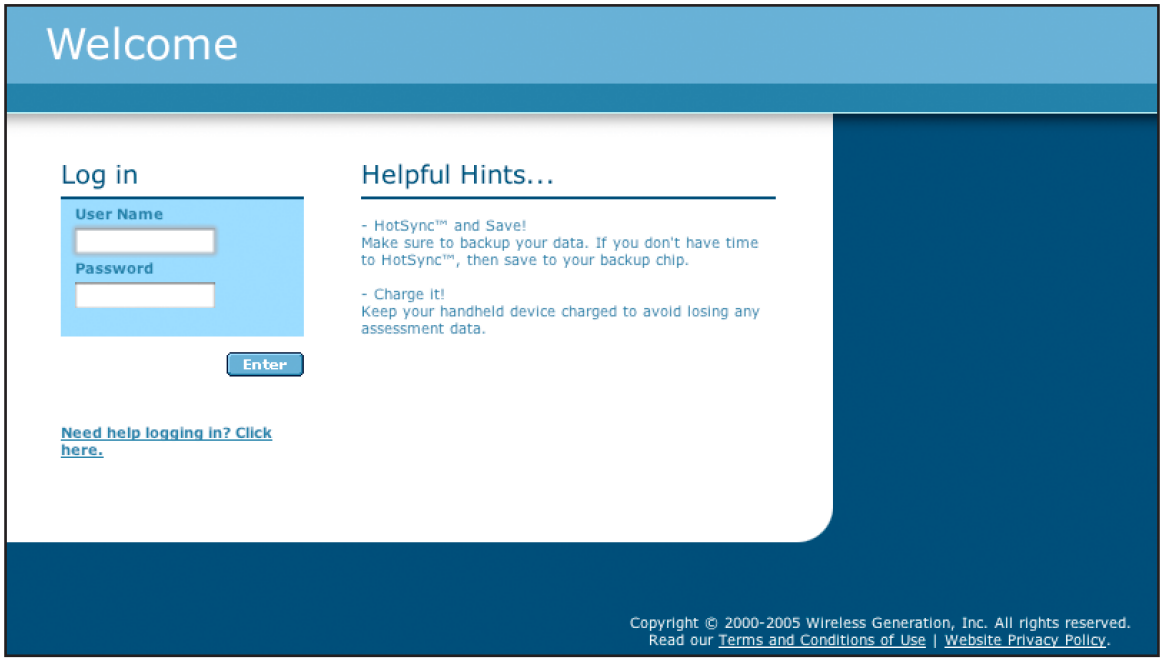
- Used your handheld to conduct interviews and record the results
- Performed a synchronization with your handheld at a designated mCLASS Sync Station

Types of Reports

- The Class Report shows each student's scores and percentiles for each measure during the selected benchmark window.
- The Student Report provides one student's scores and percentiles for a selected measure during all benchmark windows, showing the overall progress of the chosen student.
- The Measure Detail Reports present one student's Screening and Progress Monitoring scores and percentiles for the selected measure.

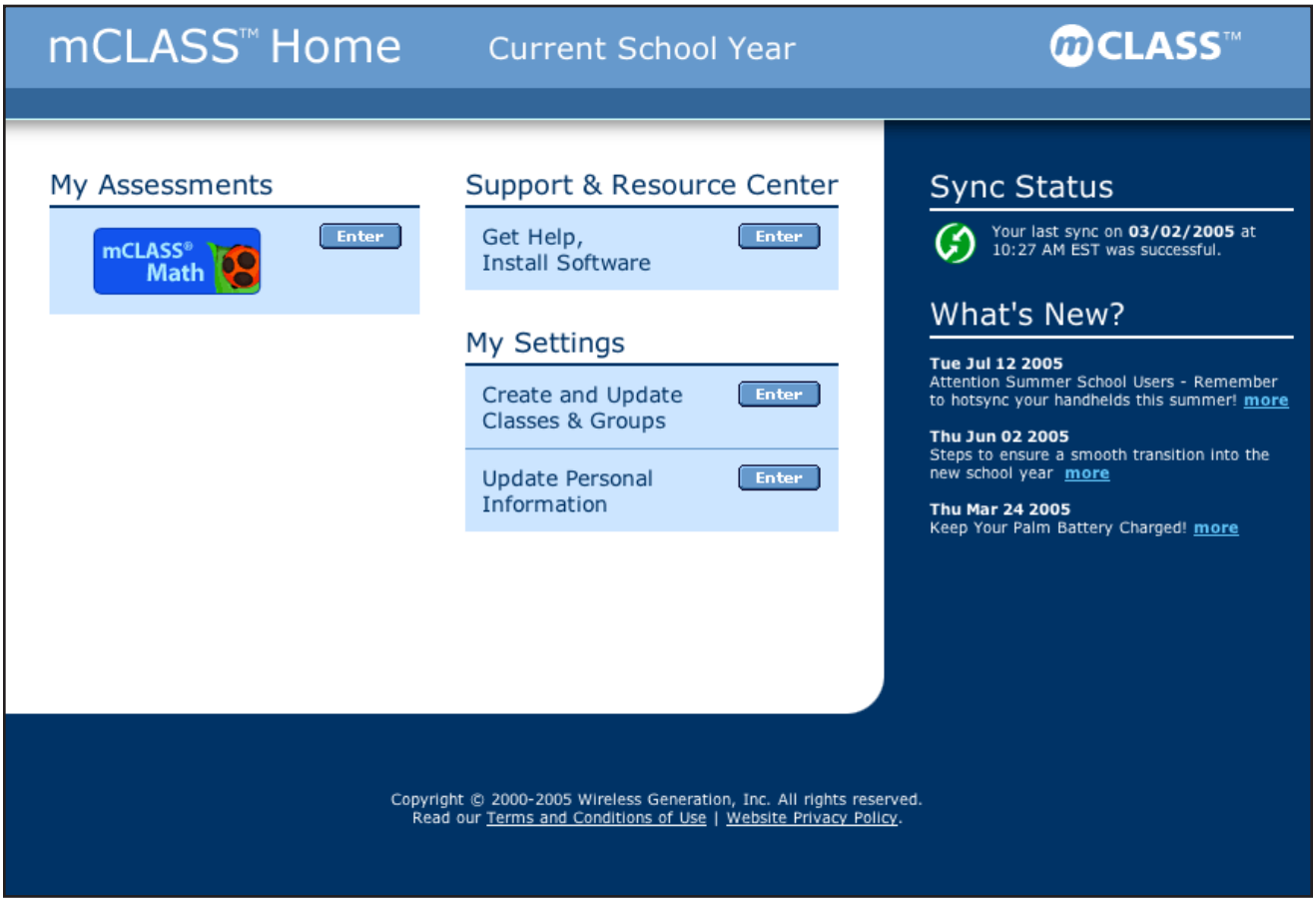
Logging In

1. To access the Web reports, locate any computer with an Internet connection. This does not have to be one of the designated Sync Stations in your school.
2. Open your Web browser and go to https://www.mclasshome.com.
3. At the Welcome page, type your assigned user name and password, then click **Enter**.



Accessing mCLASS:Math

After signing in, you see a home page for the mCLASS products to which you have access.



If you have forgotten your password, click the **Need help logging in?** link. If you experience issues, contact your school's technology department or contact Wireless Generation's Customer Care at (800) 823-1969 and select option 3.

To view the mCLASS:Math results for your classes, click the **Enter** button next to the mCLASS:Math logo in the My Assessments section.

Navigating mCLASS:Math Web Reports

Every Web report has navigational features that help you to find and view class, student, and measure information.

The Banner

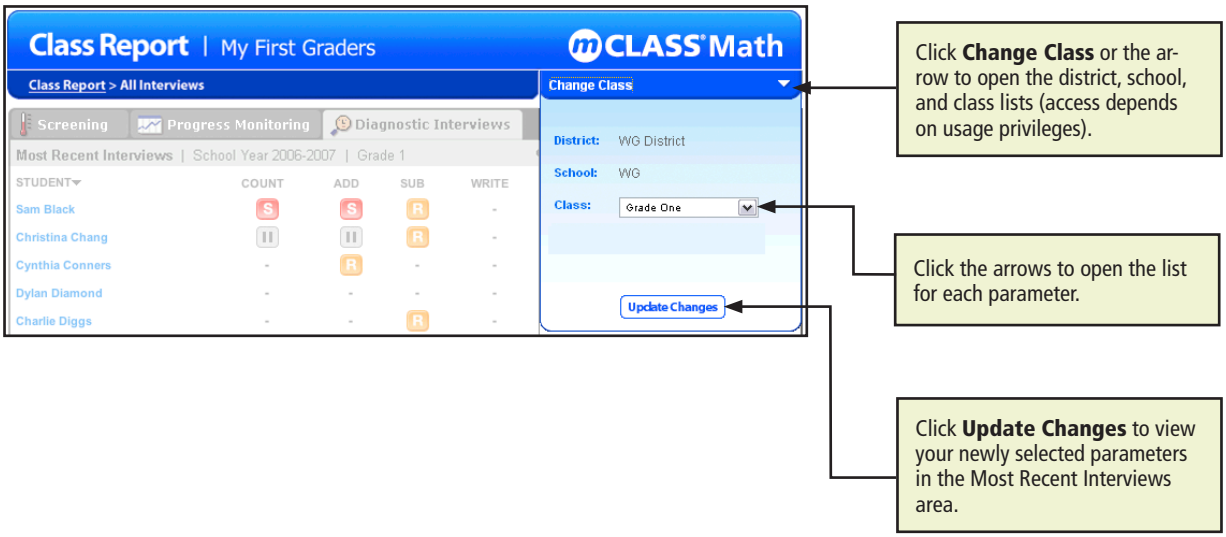
The banner displays the name of the report you are viewing. On Class Reports, the banner also will show the name of the class; on Student and Measure Detail Reports, the banner also will show the child's name.

In addition, the banner contains a navigation bar that shows the path you took to arrive at the report you are viewing.

If you click an underlined report name, you will be taken to that report. The last name in the series will not be underlined, as that is the report you are currently viewing.

Changing the Class

Your access privileges determine which district, school, and class results you can view.



Report Tabs

Report tabs allow you to switch among the various viewing options that exist. The three tabs correspond to three of the components of the mCLASS:Math assessment: Screening, Progress Monitoring, and Diagnostic Interviews.

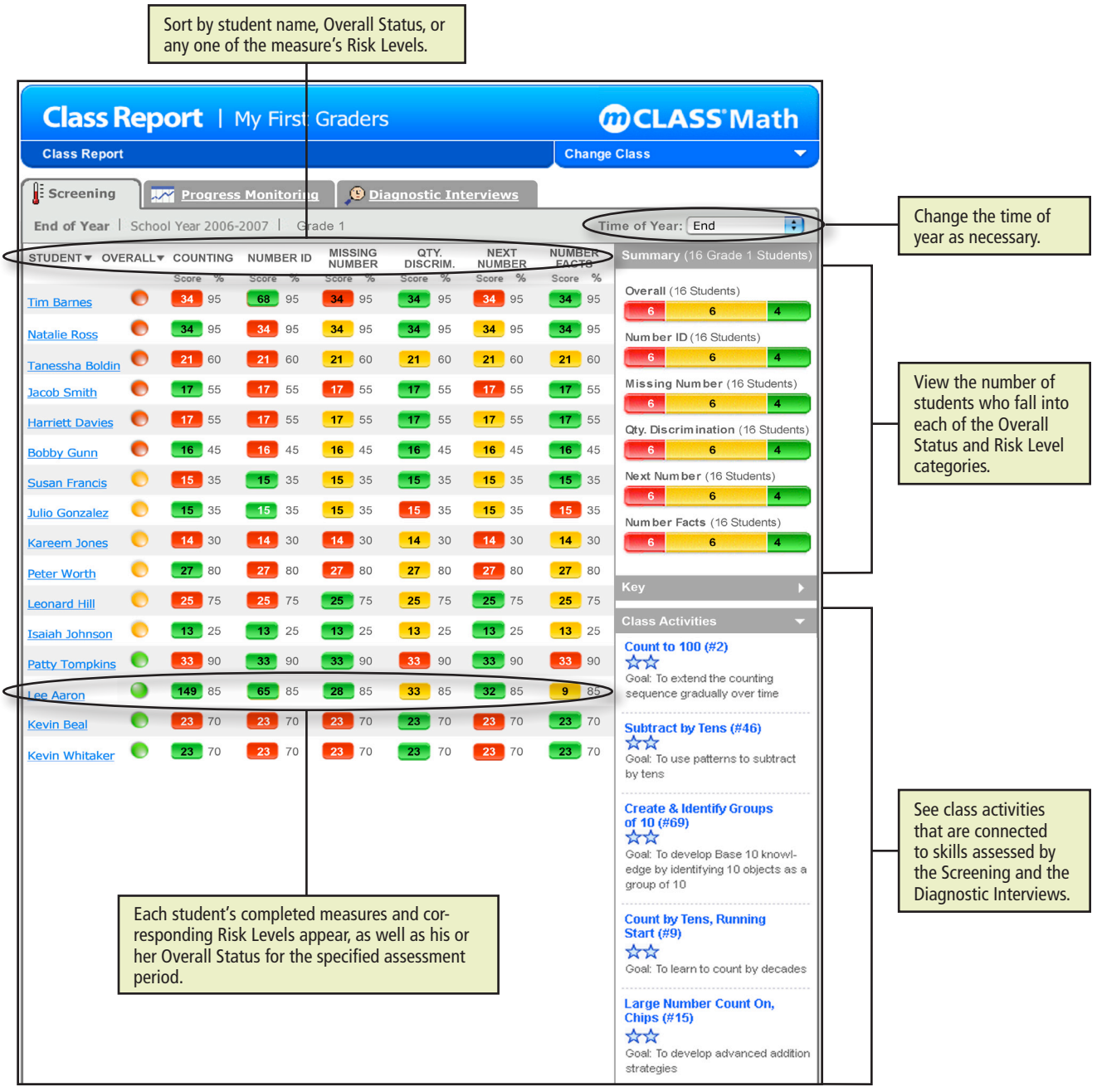
Each tab's reports provide different ways of filtering information to support rich data analysis that can be used for classroom instructional changes.

Screening Class Report

The Screening Class Report displays the scores and percentiles of measures for all children in a class during the selected benchmark window.

Scores reflect the number of correct responses in one minute, and district-level percentiles may help you gauge a student's performance relative to other students in your district. (Please note that these may fluctuate but will stabilize as data becomes available.)

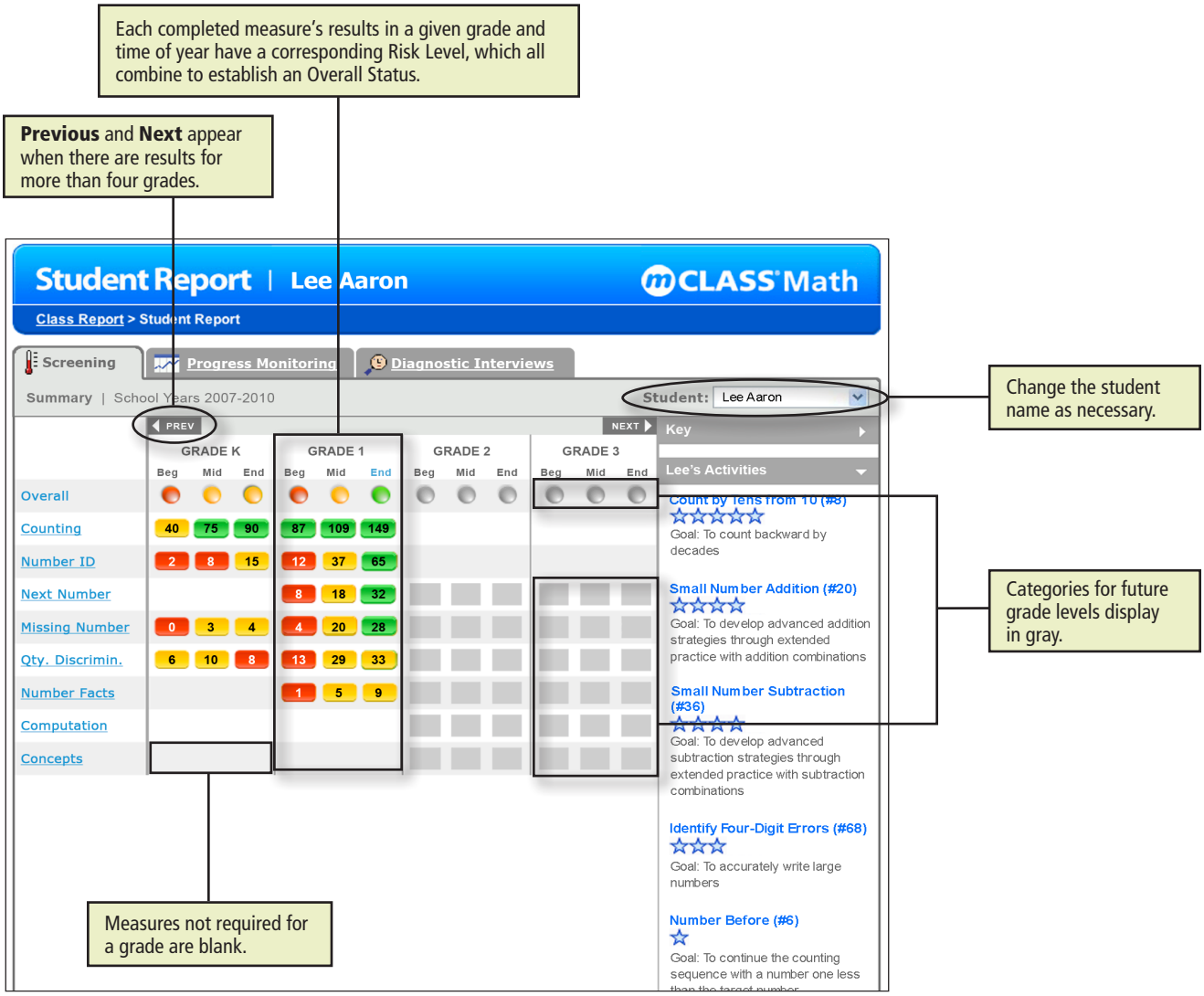
Sort by student name, Overall Status, or Risk Level within a measure. Click a student's name to open the Student Report or click the Progress Monitoring tab to view a Progress Monitoring Class Report.



Student Report

The Student Report provides a rich history of a student's mathematical development. Results are documented each year a student participates in the assessment, for all grades and assessment periods.

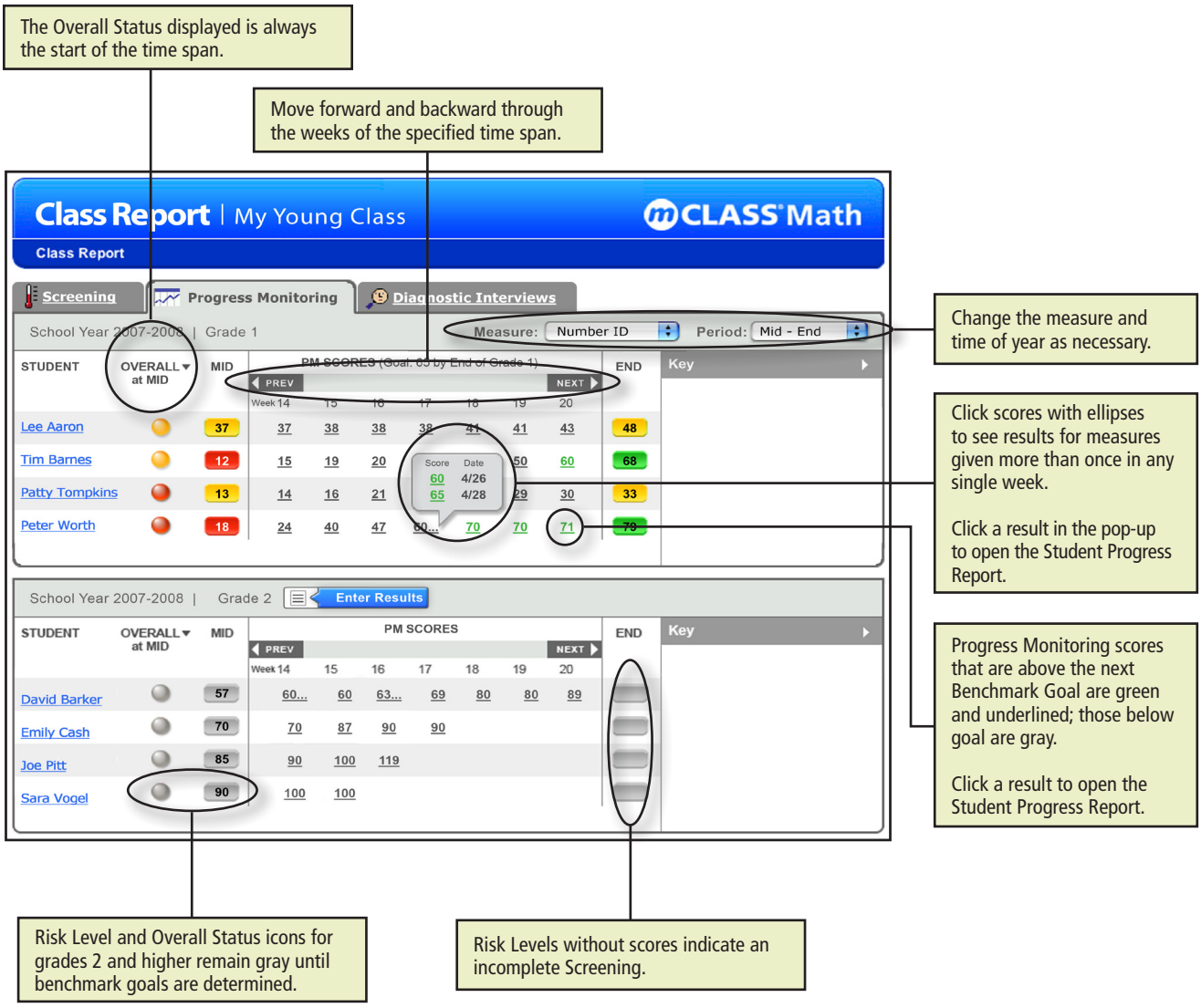
The gray boxes represent measures that have yet to be completed, while the empty areas mean that the measure is not required for the student's grade or time of year.



Progress Monitoring Class Report

The Progress Monitoring Class Report lists all results for measures administered between Screenings, from Beginning of the Year to Middle of the Year and Middle of the Year to End of the Year. There are no reports for any other time frames. To view every week of the time span, click **Previous** and **Next**.

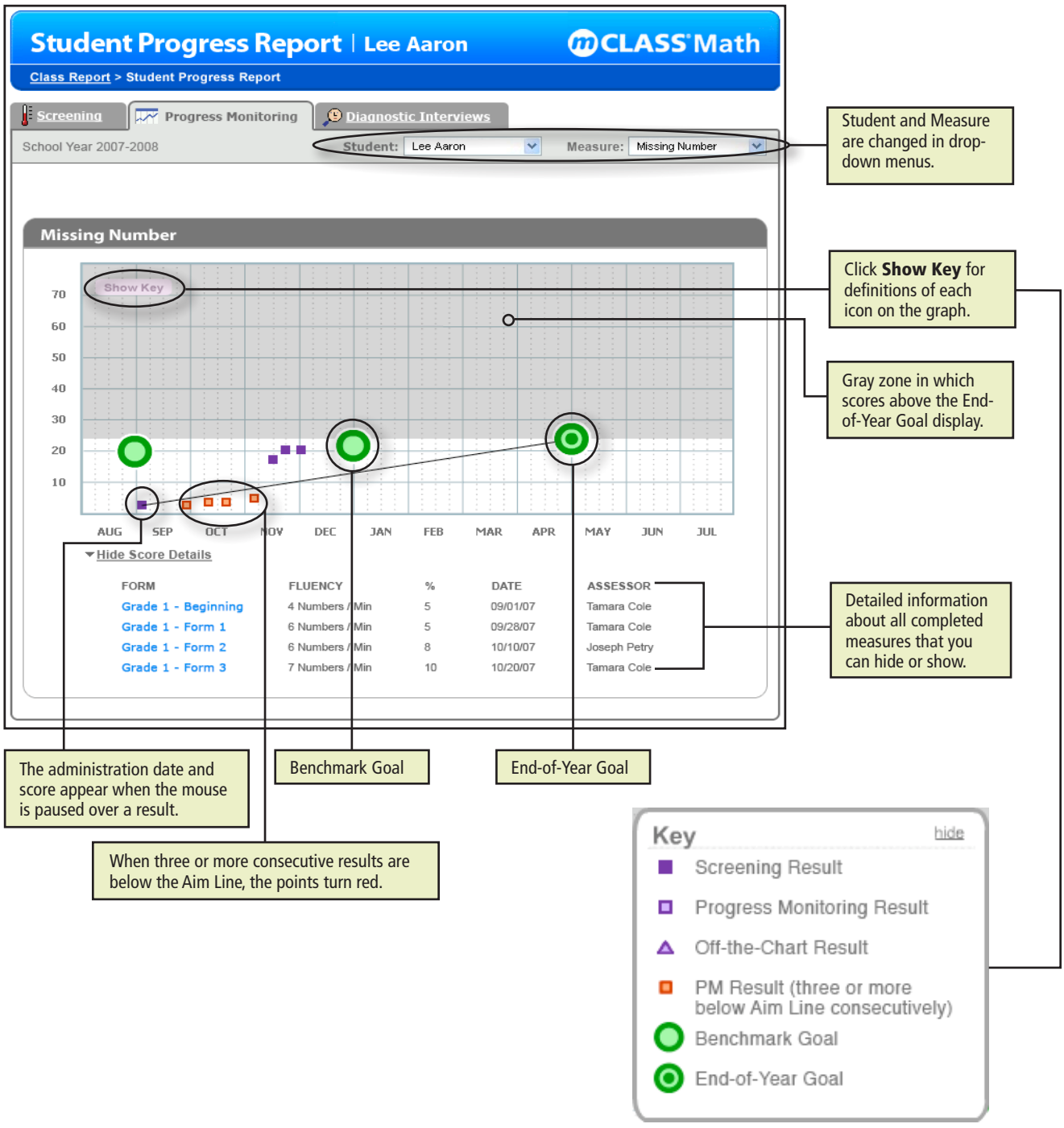
Each assessment period's Risk Level displays as well as the Overall Status established at the beginning of the time span.



Only one score can display for each week. Weeks in which there are multiple results are marked by an ellipsis. When you hover the mouse over those scores, information for each administration of that week pops up. Click a score to open the Student Progress Report.

Student Progress Report

The Student Progress Report shows both Screening and Progress Monitoring scores for an individual student and measure. It also displays the Benchmark and End-of-Year Goals with an Aim Line from the first Benchmark result to the End of Year goal. The objective is for all results to be above the Aim Line, meaning the student is making sufficient advancement toward the upcoming goal. Students who score below the Aim Line three or more times consecutively require significant and immediate intervention. Those scores become red on the Student Progress Report, alerting you to that urgency.



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