



HMH Algebra 1, Geometry, Algebra 2 and Integrated Mathematics 1, 2, 3 USER GUIDE

**Personal Math Trainer**Powered by Knewton

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# I. OVERVIEW AND MODES OF PMT

Personal Math Trainer® Powered by Knewton™ (PMT) is a powerful tool that monitors student assessments, quizzes, and homework to provide them with targeted support.

#### PMT can be utilized in the following ways.

- Tests & Quizzes: can be used for diagnostic, formative, and summative assessment
- Homework: reinforces what has been taught and offers learning aids
- Adaptive Intervention and Enrichment: builds a student profile, identifies student proficiencies and weaknesses, and can create a personalized learning path
- Tracking: can show student progress and growth over time
- Reporting: can generate student and class reports by standard or by assignment
- Grading: automatically scores items

#### PRE-BUILT PMT ASSIGNMENTS

PMT is a collection of pre-built assignments that can be assigned to students in different modes.

Visit **my.hrw.com** to gain access. The differences between the modes are summarized in the table on the next page.

#### **Tests and Quizzes Mode**

- Are You Ready? (available for every Module)
- Module Pre-Test and Post-Test (parallel assessments)
- Module Assessment Readiness
- Unit Assessment Readiness

#### **Homework Mode**

- Are You Ready? (available for every Module)
- Lesson Your Turns
- Lesson Homework

#### **Knewton Adaptive Mode**

There are pre-built assignments from both modes that can be assigned to students with Knewton Adaptive Workflows so that PMT Powered by Knewton creates personalized intervention, warm-ups, and/or enrichment for students. See page 4 for additional information.

#### **ISE Mode**

The Interactive Student Edition (ISE) follows the 5E instructional model of the lesson. Personal Math Trainer will appear in the Explain (Your Turn problems) and Evaluate sections of the ISE.

#### **Freeplay Mode**

Freeplay Mode can be found in the Interactive Student Edition at point of use for different problem sets. Students can access PMT in Freeplay Mode via their ISE on the Student Dashboard. Student usage is neither tracked nor added to teacher reports.

#### **Characteristics of PMT Modes**

Modes of PMT	Color of Band	Learning Aid Links	Check Answer/Try Another	Assigned by Teacher	Knewton Assignments	Automatic Grading and Real-Time Reporting
Tests and Quizzes Mode	Personal Math Trainer	No	No	Yes	No	Yes
Homework Mode	Personal Math Trainer	Yes	Yes	Yes	No	Yes
*Knewton Adaptive Mode	Personal Math Trainer	Yes**	Yes**	Yes	Yes	Yes
ISE Mode	Explain (Your Turn Problems)  Personal Math Trainer  Evaluate (same items as Lesson Homework)	Yes	Yes	Yes	No	Yes
Freeplay Mode	N/A	Yes	Yes	No (accessed via the Interactive Student Edition)	No	No (but it will give a score to student)

\*Knewton Adaptive Mode: By selecting an assignment in Active (Daily) Intervention, Standard-Based Intervention, or Course Intervention, Knewton will generate additional, personalized assignments for students based on their performance. The following Knewton Adaptive Workflows are available for HMH® Algebra 1, Geometry, Algebra 2 (AGA) and HMH Integrated Mathematics 1, 2, 3:

- Active (Daily) Intervention: We recommend you assign the Active Intervention Workflow when you want students to receive a personalized warm-up to the assignment and high-achieving students to receive an enrichment assignment.
- Course Intervention: We recommend you assign the Course Intervention Workflow as support for students who struggle with the content and standards being taught in a particular assignment.
- Standard-Based Intervention: We recommend you assign the Standard-Based Intervention Workflow as support for students who need additional preparation for benchmark and end-of-course exams.

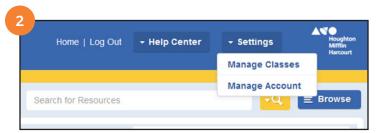
#### **Active (Daily) Intervention Workflow**

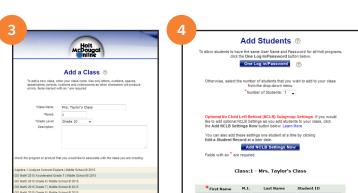
- Knewton Warm-Up (8 minutes): Generated automatically by Knewton for students who may have difficulty on the upcoming pre-built assignment based on previous performance. \*\*Learning Aids and Check Answer/Try Another enabled.
- Pre-Built Assignment: The **HMH AGA** or **Integrated 1, 2, 3** assignment being given to the student; includes an enrichment threshold setting. \*\*Learning Aids and Check Answer/Try Another disabled.
- Knewton Enrichment (10 minutes): Generated for students who exceeded the enrichment threshold on the pre-built assignment; includes challenging items. \*\*Learning Aids and Check Answer/Try Another enabled.

#### Standard-Based Intervention and Course Intervention Workflows

- Pre-Built Assignment: The **HMH AGA** or *Integrated 1, 2, 3* assignment being given to the student; includes a threshold setting for generation of Knewton prescriptive intervention. \*\*Learning Aids and Check Answer/Try Another disabled.
- Knewton Prescription (20 minutes): Generated for students who score below the intervention threshold on the pre-built assignment; a personalized assignment containing items intended to address student learning gaps. \*\*Learning Aids and Check Answer/Try Another enabled.
- Re-Assessment: The initial Pre-Built Assignment is given to the student again so they can show growth and improve their score. \*\*Learning Aids and Check Answer/Try Another disabled.

# II. SETTING UP A CLASSROOM WITH ADAPTIVE LEARNING



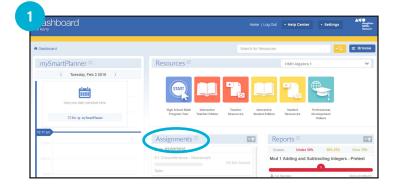


- 1. Log in to your Teacher Dashboard on **my.hrw.com**
- 2. Click on **Settings** and select **Manage Classes**.
- 3. Select **Add a Class** (follow instructions on page).
- 4. Select **Add Students** (follow instructions on page).
- 5. Click on **Home** to return to **Teacher Dashboard.**



# III. LOCATING PMT TO MAKE ASSIGNMENTS

There are several ways to locate PMT and the ISE on **my.hrw.com** to assign and/or schedule it. You can create or manage your assignments by selecting the **Assignments**, **Browse**, and **Search** functions on the Teacher Dashboard.



#### **Using ASSIGNMENTS to locate PMT or ISE**

 Locate the Assignment section on the Teacher Dashboard and select **Assignments**.



 Choose the appropriate Class, Book, Category, and Grade at the top of the Assignments page and click on Submit.

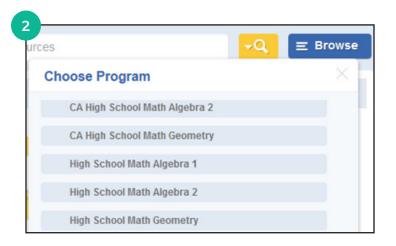


 The different assignments available for a Category are listed sequentially with 25 assignments on a page. Scroll left or right to see the previous or next 25 assignments. Click on **Assign** on the specific lesson you want to assign PMT.

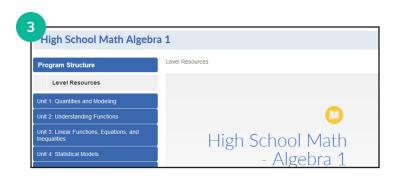


#### **Using BROWSE to Locate PMT or ISE**

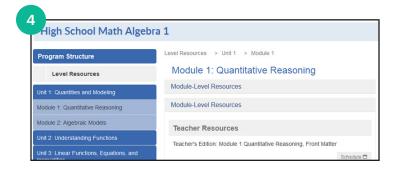
 Locate Browse in the upper right-hand corner of the Teacher Dashboard and click on it.



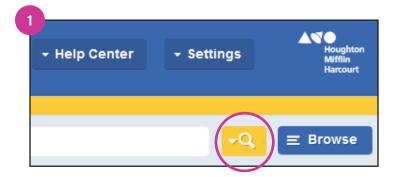
2. Select your program name and grade level from the drop-down menu.



3. Select **Program Structure** on the browse landing page.

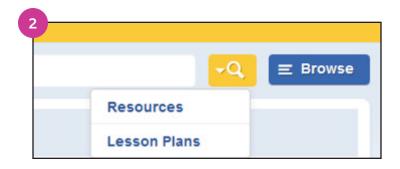


4. Select the specific Unit, Module, or Lesson from which you want to assign PMT or ISE. The ISE is found under Lesson-Level Resources.



#### **Using SEARCH to Locate PMT or ISE**

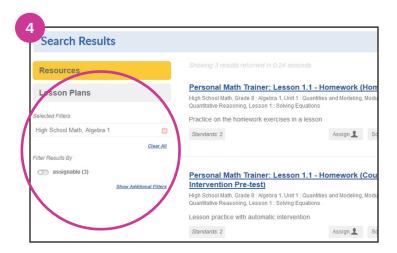
1. Locate the **Search** icon in the upper right-hand corner of the **Teacher Dashboard** and click on it.



2. Select **Resources** from the Search drop-down menu.



3. Type in the PMT or ISE resource that you would like to preview, assign, or schedule and press enter.

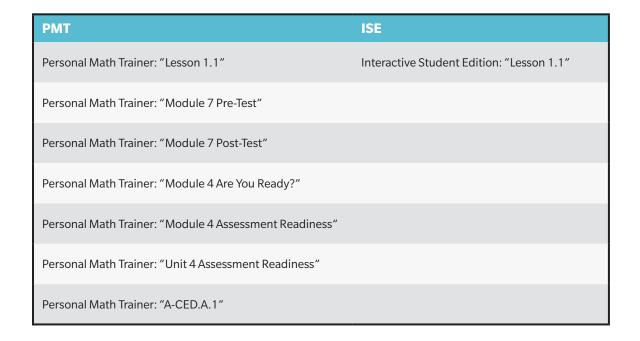


4. You can narrow down the search results by using the filters on the left-hand side of the screen.

# **READ ME**

The chart below contains helpful search terms that will quickly and accurately pull up the PMT or ISE resources for which you are searching.

Type in exactly what is indicated, and change to desired Module, Lesson, or Standard number.



# IV. VIEWING PMT BEFORE ASSIGNING IT

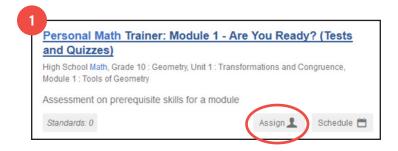
Whether you use the Browse, Assignment, or Search option to find PMT, you can always preview it before creating the assignment.



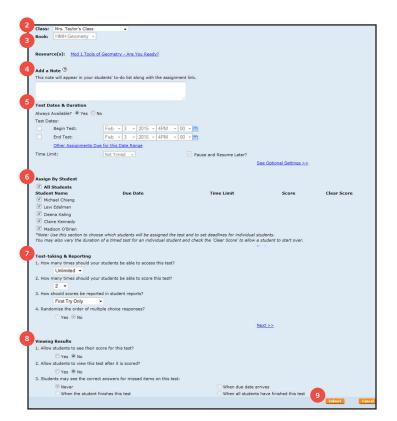
# IV. ASSIGNING PMT

#### Assigning PMT through Browse, Search, and mySmartPlanner

When a teacher assigns PMT without utilizing adaptive workflows, the student will receive only the pre-built assignment. Because this is a pre-built assignment, Knewton will not add on additional intervention or enrichment assignments. However, Knewton will still collect data from PMT assignments even when the Adaptive Workflows are not being utilized. See more details about **Characteristics of PMT Modes** on page 4.



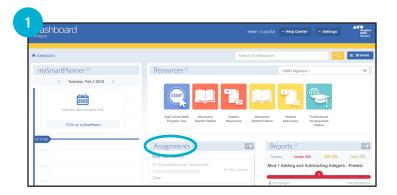
 Locate a PMT (or ISE) resource and click on **Assign**. (See the previous section for more information on **Locating PMT Assignments**.)



- 2. Select a **Class** from the drop-down menu.
- 3. Select a **Book** from the drop-down menu.
- 4. **Add a Note** that you would like to appear with the assignment on the Student Dashboard.
- 5. **Test Dates & Duration** allows you to decide if you want the assignment to always be available (select YES) or if you want the assignment to have a due date (select NO). If you select NO, you will need to set start and end dates using the **Assignment Begin** and **Assignment End** fields.\*
- 6. **Assign by Student** allows you to select either all students in a class or individual students for the assignment.
- 7. **Test-taking & Reporting** allows you to set the number of times students can access the test and the number of times the test will be scored.
- 8. **Viewing Results** allows you to control whether or not a student can see the results and view the test items immediately after it is scored.
- 9. Click on **Submit** at the bottom of the page.

\***Note**: Students must click the **Turn It In** button prior to the end time of the assignment, otherwise their work will be lost.

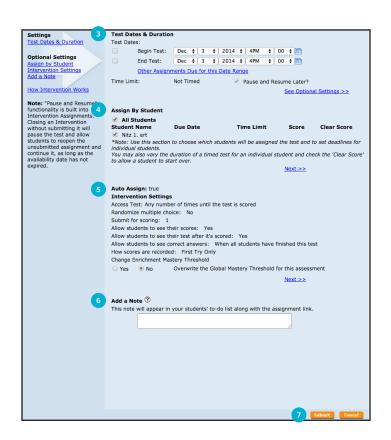
#### **Assigning PMT through Assignments on the Teacher Dashboard**



 Locate the Assignments section on the Teacher Dashboard and click on **Assignments**.



 Locate a PMT resource and click on **Assign**.
 (See the previous section for more information on **Locating PMT Assignments**.)

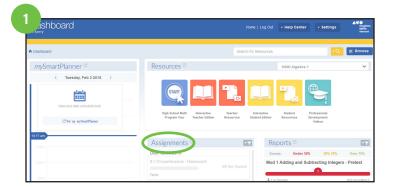


- 3. **Test Dates & Duration** allows you to decide if you want the assignment to always be available (select YES) or if you want the assignment to have a due date (select NO). If you select NO, you will need to set start and end dates by selecting from the **Assignment Begin** and **Assignment End** options.
- 4. **Assign by Student** allows you to select either all students in a class or individual students for the assignment.
- 5. **Intervention Settings** for Knewton Adaptive Mode assignments allow you to set a specific threshold for Enrichment and Intervention or use the default settings.\*
- 6. **Add a Note** that you would like to include with this assignment on the Student Dashboard.
- 7. Click on **Submit** at the bottom of the page.
- \*Note: Intervention Settings are only available with Active (Daily) Intervention, Standard-Based Intervention, and Course Intervention. This setting is also available with these PMT assignments through Browse, Search, and mySmartPlanner.

# VI. EDITING PMT ASSIGNMENTS

PMT Assignments can be edited through the **Workflow Editor.** 

**Note**: Once a PMT Assignment has been edited, you can no longer assign it in Knewton Adaptive Mode.

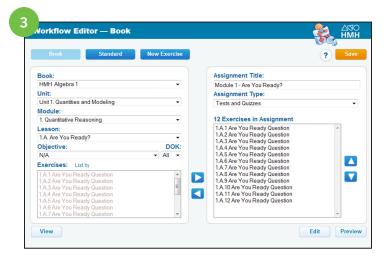


#### **Pathway to Edit**

 Locate the Assignments section on the Teacher Dashboard and click on **Assignments**.



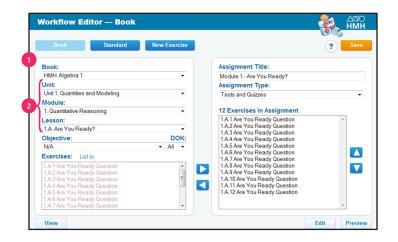
2. Locate the PMT resource you want to edit and click on **Edit**.



3. Use the Workflow Editor to edit the PMT Assignment. (See the next section for more details.)

The left side of the Workflow Editor contains the entire bank of PMT content available for your program.

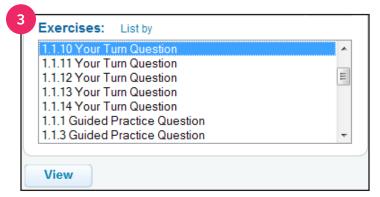
The right side of the Workflow Editor contains details of the PMT assignment you are customizing.



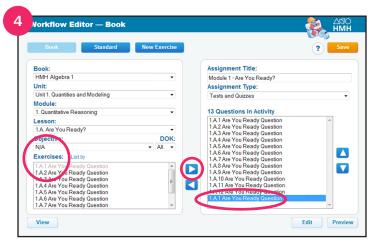
#### **USING THE WORKFLOW EDITOR**

#### **Editing by Book**

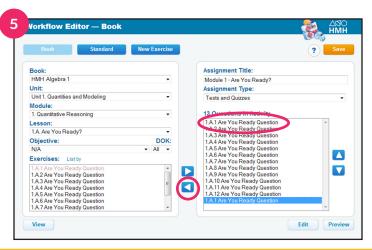
- 1. Select a **Book** from the drop-down menu.
- 2. Select the appropriate **Unit**, **Module**, and **Lesson** from the drop-down menus.



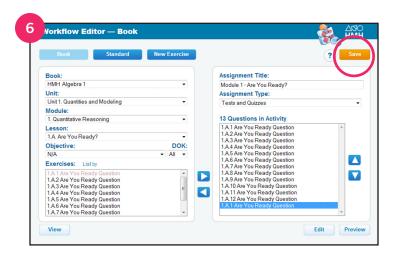
3. To preview a specific exercise, select a question from the **Exercises** list and click on **View**.



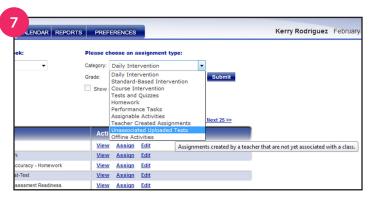
4. To add pre-built questions to the current assignment, select a specific question from the **Exercises** list and then click on the right arrow. Note: The question will move from the **Exercises** list to the **Questions in Activity** list.



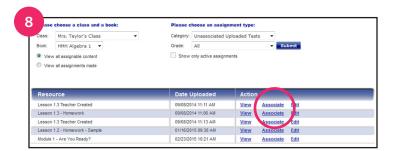
5. To remove existing questions, select a specific exercise from the **Exercises in Assignment** list and click on the left arrow.



6. Select **Save** at the top of the page.



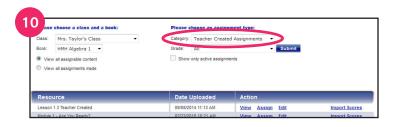
 Once a PMT Assignment has been edited and saved, it can be found under Unassociated Uploaded Tests under the Category drop-down menu on the Assignments homepage.



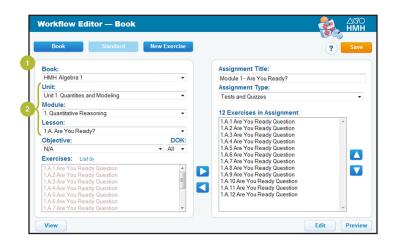
8. Before an edited assignment can be assigned, it must be associated with a specific book. To associate the new assignment with a specific book, locate the assignment you would like to associate and click on **Associate**. Note: A new screen will pop up.



9. Select the box next to the product with which you would like to associate the edited assignment.



10. Once you have associated an edited assignment with a product, the new assignment is available under Teacher Created Assignments under the Category drop-down menu on the Assignments homepage.



#### **USING THE WORKFLOW EDITOR**

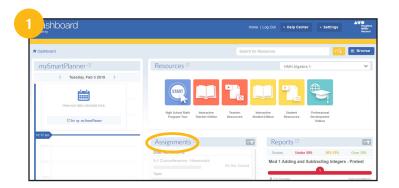
#### **Editing by Standard**

- 1. Select a **Book** from the drop-down menu.
- 2. Select the appropriate **Domain**, **Cluster**, and **Standard** from the drop-down menus.
- 3. Follow steps 3–10 from the previous section.

## VII.CREATING NEW PMT ASSIGNMENTS

PMT Assignments can be created through the **Workflow Editor**.

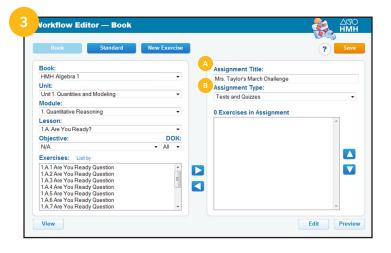
**Note**: Once a PMT Assignment has been created, you can no longer assign it in Knewton Adaptive Mode.



1. Locate the Assignments on the Teacher Dashboard and click on **Assignments**.



- 2. Choose the appropriate **Class**, **Book**, **Category**, and **Grade** at the top of the Assignments page and select **Create**.
- 3. Use the Workflow Editor to create a new PMT Assignment. (See section below for more details.)



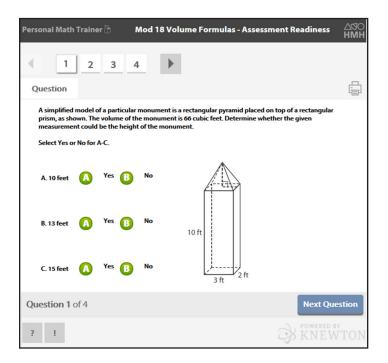
#### **USING THE WORKFLOW EDITOR**

#### **Creating a new PMT Assignment**

- A. You can modify the title of your new assignment using the **Assignment Title** field.
- B. Select the appropriate **Assignment Type** from the drop-down menu.
- C. For remaining steps, see the previous section for more information on **Editing PMT Assignments**.

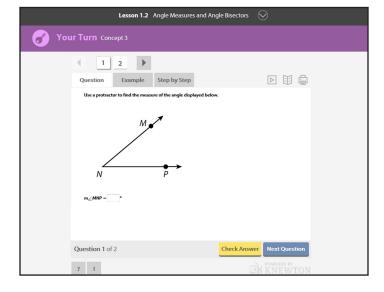
# **VIII. STUDENT ACCESS TO PMT**

Students can access PMT from the Student Dashboard in two different ways.



#### **Assigned PMT**

- Assigned by teacher in either non-adaptive or Knewton adaptive mode.
- Accessed in My Assignments.

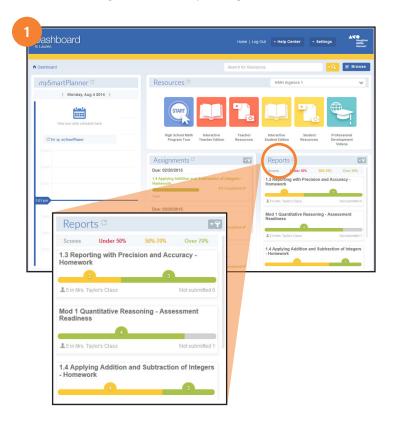


## **Interactive Student Edition (ISE)**

- ISE lessons must be assigned to students by the teacher in order to generate reports.
- Accessed in My Assignments.
- PMT is linked to the **Explain** (Your Turn Problems) and **Evaluate** sections of the ISE.

# **VIII. REPORTS**

With the Reports section of the Teacher Dashboard, you can view class performance on assessments and easily access full **my.hrw.com** reporting features.



1. Locate the **Reports** on the Teacher Dashboard.

Note: Once an assignment is scored, it moves to the reports section where you will be able to view students' assessment results that were due in the past four weeks. Each assessment report shows the number of students in four bands. Scores over 70% are in green. Scores between 50% and 70% are in yellow. Scores below 50% are in red. Anything not submitted will be gray. Under the performance band are the number of students that have scored assignments and the name of the class.

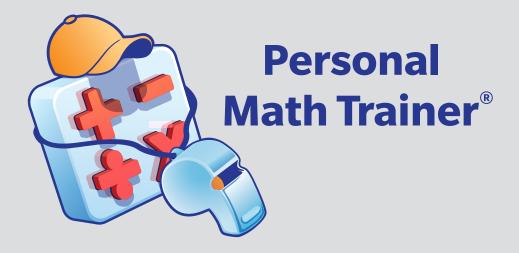
7	
Ho	oughton Mifflin Harcourt
WELCO	ME ASSIGNMENTS CALENDAR REPORTS PREFERENCES
Please ch	oose a Class and a Book:
Class:	Mrs. Taylor's Class ‡
Book:	HMH Geometry ‡
DOOK.	THE OCCUPATION OF THE PROPERTY OF
Repor	
Class C	omprehensive Overview:
View res	ults for cumulative information.
Class Pi	rogress Report:
	ults for Tests and Quizzes, Homework and Teacher Created Assignments posted on Holt McDougal Online. Drill down from the C Report to see details for individual Students or individual assignments.
Knewto	n Analytics Report
View Kn	ewton analytics report for this class.
Daily Int	ervention:
	ults for online Daily Intervention assignments based on textbook objectives. Drill down from the Class Intervention Report to ils for individual assignments or individual students.
Standar	ds:
View tes	and quiz results correlated to state or national standards.
Course	intervention:
down fro	ults for online Intervention assignments based on textbook objectives. Drill in the Class Intervention Report to see details for individual assignments or I students.

2. Click on **Reports** to access the Reports Page, where you will be able to generate a variety of reports by students, groups, class, or standards.



3. For additional information on generating reports, please reference the Personal Math Trainer Reports Guide or see the **Help Center** located on the upper-right corner of the Reports page.

NOTES			



# HMH Algebra 1, Geometry, Algebra 2 and Integrated Mathematics 1, 2, 3 USER GUIDE

# **Personal Math Trainer**

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