# **4Mality Manual for Teachers**

## **Reaching the 4Mality Login Page**

• Go to 4mality.org and click on the 4Mality Login Page link at the top of the page:



# 4Mality: 4th Grade MCAS Active Learning Intelligent Tutoring System (www.4mality.org)

4-ality 4Mality Login Page

# 4Mality

Description Go to the 4Mality Demo MCAS News Research The 4Mality Team Funding

**4Mality** is an Intelligent Tutoring System for 3rd and 4th grade students preparing to take the 4th Grade Math Massachusetts Comprehensive Assessment System (MCAS) test.

4Mality has several characteristics that make it a unique tutoring system:

- It teaches not only subject matter content but also problem solving skills
- It adapts to the level of knowledge and learning style of every student by using an Artificial Intelligence decision system

## Logging In

• In the 4Mality login page, enter your user ID and password and click "Login"

4 mality: Lo	gin		
		Please Logi	n
Lo	ogin: assword:		
		Login	Clear

• After logging in, the teacher home page will appear, with all the options open to the teacher:

# 4 m a l i t y : Teacher Home

## Welcome XXXXX

# Ms. XXXXX's Class, Hudson Schools

Þ	View Class Content					
2	Edit Class Content					
Reports:						
•	View All Student Module Activity					
•	View All Student Skills Report					
View Individual Student Progress						
Click off	to view that student's report.					
•	Student 1					
Þ	Student 2					
Þ	Student 3					

## To See What Questions Are Available to Your Students

- In the teacher home page, click on "View Class Content"
- The first time you log in there will be 7 modules (groups of questions) available to your students:
  - one pre-test module formed by questions with no help provided to the student (no helpful hints in the right side of the screen)
  - six practice modules with questions for which hints are available to the student. Each module contains questions on a particular topic (e.g. fractions, place value, etc.)

This page provides you with a way to step through all of the content your students see. Your answers are not logged as they are for students. Therefore, you will not see your scores change as you answer the questions.

#### Click HERE for information about the Hint Coaches.

PreTest Modules							
•	Pre Test 1	Answered: Total quest	n.a. ions: 12				
Prac	tice Modules						
Þ	Hudson: Place Val Numbers	Correct: n.a. Total questions: 3					
•	Hudson: Place Val Decimals/Fractic	Correct: n.a. Total questions: 3					
•	Hudson: Operatio	Correct: n.a. Total questions: 4					
•	Hudson: Fraction	Correct: n.a. Total questions: 4					
•	Hudson: Operatio	Correct: n.a. Total questions: 3					
•	Hudson: Operatio	Correct: n.a. Total questions: 4					

- The role of the pretest module is to get an estimate of the student's starting point
- To see the questions included in a particular module, click on the arrow to the left of the name of the module and then click on "Begin Module"

#### To See An Individual Student Progress Report

• In the teacher home page, click on the arrow to the left of the student's name to go to that student's individual activity report, which looks like this:

## 4 m a l i t y : Individual Activity Report

#### Student Activity Report for: Student 1

Click on the skill for more info about that Framework Standard

This color is displayed if a correct answer was ever recorded for a question.

\*A Response Session begins when a student enters a question and ends when they exit the question. Note that they may have submitted any number of answers in one session.

Module: Hudson: Place Value Whole Numbers Type: Practice								
Q#	Skill	Correct	Hint Before 1st Ans	Hint Before Correct	Response Sessions*	Total Hints		
1	<u>4.N.1</u>	Ν	0	0	0	0		
2	<u>4.N.16</u>	Ν	0	0	0	0		
3	<u>4.N.16</u>	Ν	0	0	) 0 0			
Module: Hudson: Operations II Type: Practice								
Q#	Skill	Correct	Hint Before 1st Ans	Hint Before Correct	Response Sessions*	Total Hints		
1	<u>4.N.17 4.N.10</u>	Ν	0	0	0	0		
2	<u>4.N.13</u>	Ν	0	0	0	0		
3	<u>4.N.10</u>	Ν	0	0	0	0		
Module: Hudson: Place Value Decimals/Fractions Type: Practice								
<b>Q</b> #	Skill	Correct	Hint Before 1st Ans	Hint Before Correct	Response Sessions*	Total Hints		
1	<u>4.N.6</u>	Ν	0	0	0	0		

- For each question, the information recorded in the individual activity report is:
  - Standard tested in the question
  - If the student answered the question correctly or not
  - Number of times the student has seen the question (*response sessions*)
  - Number of hints the student saw before answering the question for the first time (*hints before*  $1^{st}$  *answer*)
  - Total number of hints the student has seen (total hints)

#### To See the Answer Pattern of Your Students for Each Question

• In the teacher home page, click on "View All Student Module Activity" to get a list of all modules available to your students:

#### 4 mality: Select Module Report

#### Select a report of class activity for a module.

Select	Module Name	Туре
•	Hudson: Place Value Whole Numbers	Practice
•	Hudson: Operations II	Practice
•	Hudson: Place Value Decimals/Fractions	Practice
•	Hudson: Operations I	Practice
•	Hudson: Fractions I	Practice
•	Pre Test 1	PreTest
•	Hudson: Operations III	Practice

• Then, click on the arrow by the name of the module to get the following table of results:

#### 4 m a l i t y : Module Report

#### All Student Activity for Module: "Hudson: Place Value Whole Numbers"

Question answers are shown in the order they appear in the module. The answers shown are the latest recorded. It is possible that a question is shown as correct, while the answer shown in the corresponding cell is not the correct answer.4mality records the first two responses only, so the correct answer may have been submitted on a further attempt. In this case, correctness is recorded, but only the latest answer is shown. It is also possible that an incorrect answer was entered at a later time.

This color is displayed if a con										
Correct Answers:	D	D	A							
Student 1	-	-	-							
Student 2	-	-	-							
Student 3	-	-	-							
Student 4	-	-	-							

This color is displayed if a correct answer was ever recorded for a question.

- On the top row you can see the right answer to every question in the module (in this case, D for question 1, D for question 2, and A for question 3)
- In the other rows you can see how each student answered each question

## To See the Strengths and Weaknesses of Your Students

- In the teacher home page, click on "View All Student Skill Reports" to get a table reporting for each student a level of mastery of each of the standards for 4<sup>th</sup> Grade Math
  - The level of mastery is 0 if the student has been unable to answer correctly a large number of questions related to that standard
  - The level of mastery is 1 if the student has consistently answered correctly a large number of questions related to that standard
- Before the students answer any questions their mastery levels are preset to those estimated for the average Massachusetts student
- Mastery levels are not reliable until the student has answered a very large number of questions (200 or more)

4 m a l i t y : Skills Report												
Click on the skill for more info about that Framework Standard.												
Framework Skills:	<u>4.N.1</u>	<u>4.N.2</u>	<u>4.N.3</u>	<u>4.N.4</u>	<u>4.N.5</u>	<u>4.N.6</u>	<u>4.N.7</u>	<u>4.N.8</u>	<u>4.N.9</u>	<u>4.N.10</u>	<u>4.N.11</u>	<u>4.N.12</u>
Mean (Statewide) Values:	0.86	0.70	0.78	0.56	0.62	0.58	0.72	0.72	0.68	0.75	0.50	0.80
Student 1	0.86	0.70	0.78	0.56	0.62	0.58	0.72	0.72	0.68	0.75	0.69	0.80
Student 2	0.86	0.70	0.78	0.56	0.62	0.58	0.72	0.72	0.68	0.75	0.69	0.80
Student 3	0.86	0.70	0.78	0.56	0.62	0.58	0.72	0.72	0.68	0.75	0.69	0.80
Student 4	0.86	0.70	0.78	0.56	0.62	0.58	0.72	0.72	0.68	0.75	0.69	0.80
Student 5	0.52	0.52	0.78	0.56	0.46	0.58	0.72	0.54	0.68	0.75	0.69	0.38

- The mastery level table has one column for each Massachusetts standard and one row for each student in the class
  - Clicking on a standard links to a description of that standard, provided by the Standards Connector website
  - o Clicking on a student's name links to that student's individual report

#### To Create New Modules for Your Students

- New modules can be created for your class or just for one or several of your students
- To do so, talk to Arthur or Michelle