



Math Einstein



WorldPT
SOFTWARE

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Welcome to WorldPT Math Einstein

Math Einstein is a digital flash card system that can be completely customized to the level of your child. It is voice enabled so that your child hears the equation as well as sees it. Hint systems are built in allowing them to visualize each equation multiple ways. You can set up custom preferences for each child and modify difficulty settings as they improve. Results can be reviewed later for patterns and to determine strengths and weakness. Preferences can be modified to attack weaknesses and promote mastery.

Why Math Einstein is Better

Flash card based programs rely on the computer's ability to generate random numbers, place them in an equation and congratulate the user if his answer matches the computers'. There is minimal emphasis on reporting, finding patterns, and reviewing problems users answer incorrectly. Learning math tables requires memorization and number recognition. It is almost impossible to attain that when equations are random.

Math Einstein uses a process of creating equations which I call Random Unique. This process does three things:

1. Eliminates duplicate equations during the quiz/test/learn modes
2. Allows quiz/test/learn modes to include any combination of addition, subtraction, multiplication, and or division
3. Provides different equations in different orders each time the student opens a quiz/test/learn mode that match selected criteria

Math Einstein allows parents to isolate what type of equations they want their child to work on and then see results over time.

Math Einstein is the only software that spends as much time teaching as it does quizzing.

Getting Started

When I was young parents didn't have to be as involved in their child's education as we are now. I was lucky to have a 5th grade teacher as a parent. One of the most important things my dad helped me with was math. I had to memorize my multiplication tables from 1-10. Not only was I tested in accuracy, I had to complete the tests at around 3 seconds a question. I want my kids to have the same advantages I've enjoyed and if you're reading this then you do to.

There is no substitute for spending time with your kids. Math Einstein will help you spend that time more efficiently.

Installing Math Einstein

You can download Math Einstein from www.MathEinstein.com.

Registration

The unregistered version of Math Einstein is fully functional so you may evaluate it completely. You may open the software 25 times before it asks you to register.

Forewarning

I would like to say that I am not an English professor. This manual is a feeble attempt to assist you in taking full advantage of the features in Math Einstein. Spelling and Grammar are my worst subjects. You will undoubtedly grimace at my sentence structure and punctuation. Please accept my apologies in advance.

Get Started

Math Einstein Home Edition supports 1-5 users/kids. Each user can have customized settings tailored to their



ability. Take a moment to review the following options because it will greatly enhance your experience with this software. The above screen is the Log On Screen. Select a user and click the Start button.

Setting User Options

After adding a user you will need to choose what type of math problems you want to work on. The User Preferences form on the menu bar will bring up the pictured form. These



options can be changed at any time. When working on multiplication simply check the Include Multiplication box. You are not limited in how many types of problems you have.

Test Options

Once you have chosen your Problem Options you can move on to the Test Options. This section allows you to focus Math Einstein on what your child needs to work on.

Choose How Problems are Created.

- **Random Unique:** This is the default setting. This allows you to utilize the full power of Math Einstein. You can select criteria to customize how problems are generated.
- **Custom Test:** Will enable the drop down box below to allow you to choose which custom test you wish to use. Custom Tests can be created by clicking on the Custom Test button on the top menu bar. Custom tests override all other settings in Math Einstein. You can go back and change the number of questions, if the test is multiple choice, and if it is timed after you select the test.

Emphasize One Particular Number: If you want to work on 4's then type "4" in the box. All problems will contain a 4. This feature is not available when using a Custom Test.

Highest Number and Lowest Numbers: These options assist you in customizing the number range from which the problems will be created. If you are using a Custom Test, these options will be grayed out. Example. In the Choose How Problems are Created you pick Random Unique. You can set the Highest Number in the Problem to 10, the Lowest Number to 1, and the Highest Answer to 100. If you are working on multiplication, it will create problems between $1 \times 1 = 1$ and $10 \times 10 = 100$.

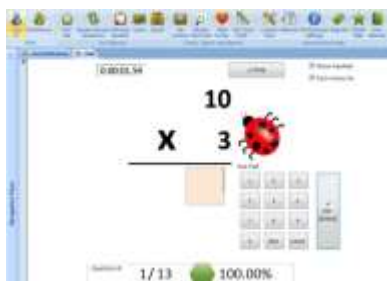
Repeat Incorrect Answers if checked will have the user re-answer any questions they missed in the current test or previous tests at the end. Questions will continue to appear until they have been answered correctly 3x. You can simply close the missed questions at any time and answer them later. Users always have the option to repeat missed questions on the test form even if you don't check this box.

You can have a time limit for tests by checking the Timed box and specify how many seconds the test should be completed in. You may enter up to 300 seconds in the Timed box.

Multiple Choice tests are given if the box is checked. Multiple choice works well with timed tests and makes memorization easier. Regular tests should be given in conjunction with multiple choice to emphasize memorized facts.

Testing

Open the test form by clicking the Test Me button on the menu bar. A test will be created based on options in the User Preferences. Check boxes on the top left allow the user to disable the number pad on the screen and disable the voice reading the problem.



Hit the Start button to display questions and start the timer. In regular testing, type the answer and hit the [Enter] or click the [Enter] button on the screen. Multiple choice testing only requires you to single click the answer.

The user may pause the test at any time by clicking the Stop button which will appear after the test is started.

Problems with numbers under 20 will display a ladybug. Clicking the ladybug will open a form that shows the problem in ladybug format to be easier to visualize. Clicking anywhere on the ladybug form will return the user back to the test form.



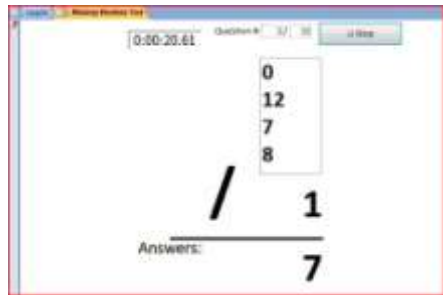
Tip: When answering questions quickly, disable the voice check box. The computer takes about 4 seconds to read the problem out loud.

Finishing a Test

When the test is completed you can re-answer missed questions by clicking on the Missed Questions button. View the test results report at the end of the test by clicking the View Results button. You can always go back and review the tests later. You may also go back and answer the questions missed at a later time using the Review Missed Questions button on the top toolbar.

Missing Number Tests

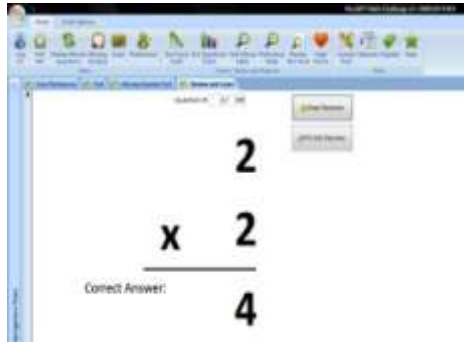
Math Einstein can create missing number questions. Users must solve the equation to get the answer displayed. Questions are limited based on user preferences with one exception. If the users want to work on Addition then Subtraction equations are displayed in this format to solve. Functions in this module are always reversed. You have to option to display this in a multiple choice or fill in the blank format.



Learn

Users often want to review math problems or learn to recognize new ones. This module creates equations based on user preferences. The answers are displayed in this format to teach users to recognize/memorize them. The equations automatically cycle but you can choose how long they stay on the screen and how many times they repeat. This module is also most helpful when emphasizing a specific number in the User Preferences.

Questions that populate the Learn module come from the User Preferences just like everything else. In Learn mode the answers are displayed after 50% of the question time has elapsed. Setting the question display time to less than 5 seconds automatically disables voice.



Quests



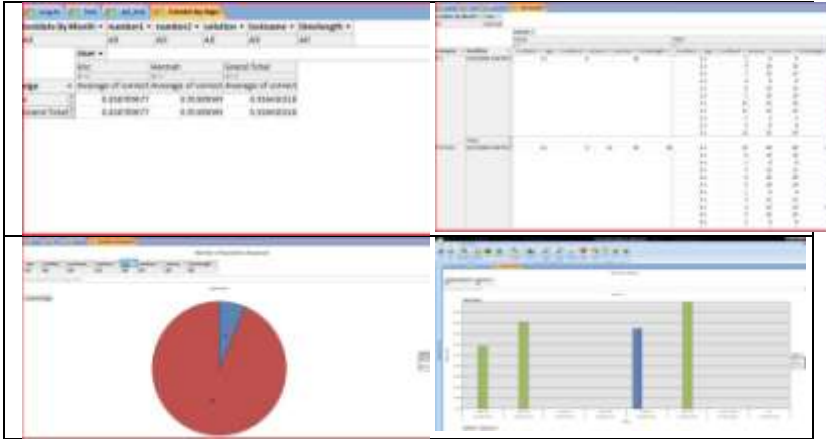
There are multiple Quests available in Math Einstein. Selecting a Quest is done by clicking the Quest button on the top toolbar. Quest questions do not count toward the users stats. The main difference in taking a Quest is that questions must be answered in a set amount of time. The Quest will stop if the question is not answered correctly in the predefined amount of time.

Completing a Quest will give the user a reward icon that is viewable in the My Awards section on the top toolbar. Each award may be printed as a certificate.

Charts and Reports

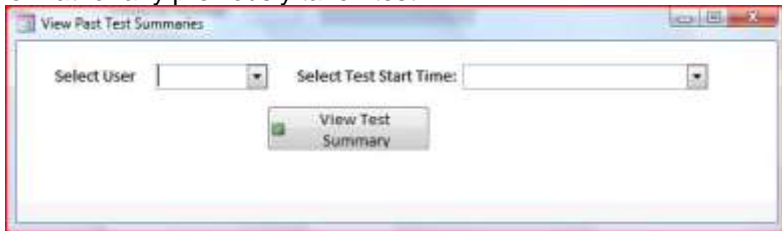
Math Einstein offers a several pivot charts and table that can be filtered by many of the variables chosen in the User Options form. Variable in the graphs can be dragged into the multi chart section.

Clicking the drop down arrows allow you to filter results of tables and charts.



Review Past Tests

Math Einstein allows you to review the test scores in “Test Page” format for any previously taken test.



The Test Summary will show the score and grade in red. In addition to showing the length on the test and the type of test that was taken, Math Einstein further breaks down the test.

The Breakdown Score show the Score for each type of problem and the number of questions.

The Missed Questions box shows not only which questions were missed but how long they took to answer.

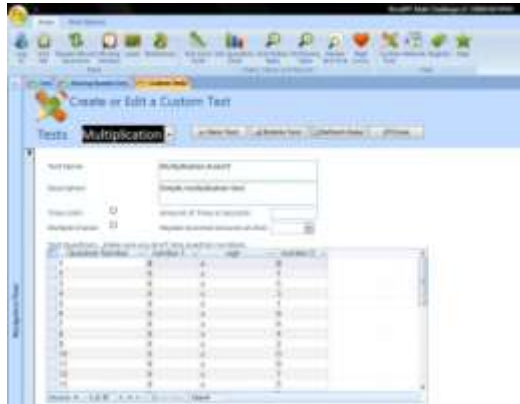


The Breakdown Average Time shows how long the user averaged for each type of question.

At the bottom of the summary you will see the test questions in order. The answer from the user, solution, if it was correct, and how long it took to answer, is displayed for each question.

Custom Tests

Math Einstein has the option to use Custom Tests in creating equations instead of simply relying on random numbers. If you have used other flash card type programs in the past you realize that certain numbers tend to appear more often than others. The truth is that random isn't really random.



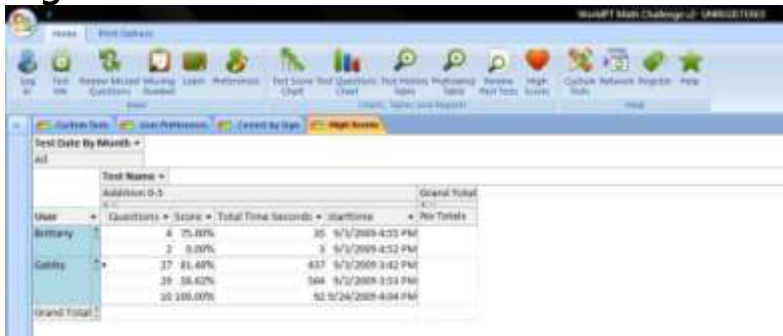
You have the ability to create your own Custom Tests. Simply hit the Custom Tests button on the top menu and hit the New Test button. Type in a name for your new test and select your test options. The test options you choose will carry over to each user when they select this Custom Test. Users will be able to change to test options before they take the test from the Preferences form but will not be able to change the test questions.

There is no limit to how many tests you can create. Please note that there is a limit on how much time you can allow for each test.

Currently you are limited to 5 minutes or 300 seconds for a timed test. You don't have to make your test timed if you know it will take more time. The stopwatch runs even if the test isn't timed to calculate which questions the user has difficulty with. Making the test timed allows you to end the test after a certain amount of time.

Enter your questions next. Below the test options is a spreadsheet. Enter the Question Number, Number 1, Sign, and Number 2. Must sure you don't skip question numbers because the test will end in an error if you do. You can go back later and change the question number or edit the variables at any time. You don't need to enter the answer to each question because it will be calculated automatically.

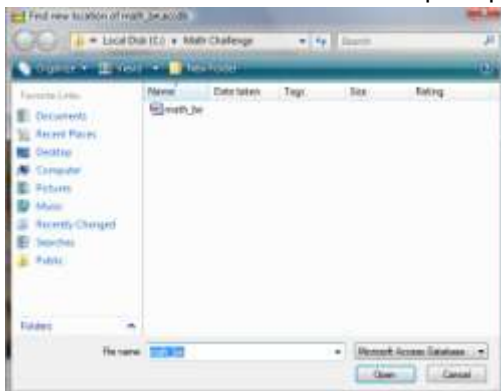
High Scores



You can view the High Scores for each user for each test by clicking the Heart icon on the main toolbar. This pivot chart can be sorted by date, test name, or user.

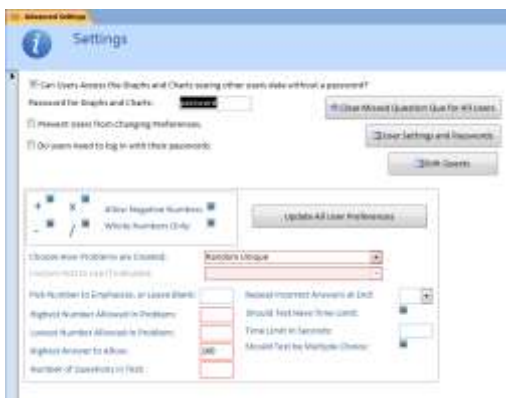
Networking

Math Einstein installs into the c:\Math Einstein directory. You may network Math Einstein so that multiple computers use the same data file. Clicking the network icon on the main toolbar will pull up the open file dialog box you see on the right. Browse for the shared folder that contains the math_be3.accdb file you wish to link to. Avoid networking Math Einstein via a wireless connection because it will usually lead to data corruption.



Professional Settings

The Professional Settings are only available in the Professional Edition. In addition to the feature listed below, the Professional Edition allows up to 50 non-archived users.



The password to open the Advanced Settings form is “3.14”

You may require a password for anyone to access the Graphs, Tables, and Past Tests so that user data is more private. You may also specify that this password is.

You may disable user's ability to change their own settings so that only you control them

You may require users to log in with a unique password of your choice.

You may edit user preferences in table format allowing you easier access. This advanced access allows you to archive users, set and change passwords, as well as edit preferences.

All user preferences may be updated to match your chosen settings with this form. You can also clear the Missed Question Queue for all users for here.

Lastly, you can edit the Quests that come with Math Einstein. You may change to award icon or simply the predefined time to complete each question. You may even add your own Quests.

Troubleshooting

