

## **Teach Magazine**

(Now **Eternal Encouragement Magazine**)

*Reviewed by Julie Kovach*

Anyone who has homeschooled more than one child for any length of time quickly realizes that in academics, as in other areas of development, children differ greatly in what they are able to learn, at what age, and how quickly they are able to learn it. This is often extremely evident in the area of mathematics. Some children take to math very easily and breeze through new concepts with understanding and ease, all the while following the scope and sequence presented in traditional text books. For many children, this is not the case. Math on the Level is a math program that will work with both types of students. It was developed by a homeschooling mom who was frustrated with the available math programs and decided to create her own. The result of her experience as a homeschooling parent along with her education background (including extensive experience with learning disabilities and a M.A. in Special Education) is this phenomenal math program, which covers preK through pre-algebra.

The premise of Math on the Level is that children are not going to learn what they are not ready to learn, and therefore you focus on teaching what the child is developmentally ready to learn, not what a textbook decides he should be ready to learn. Math on the Level presents all of the math concepts that a child needs to learn from preK through pre-algebra, but YOU get to decide what concepts are taught to your child and when. Concepts the child is not ready to learn can be dropped and revisited later.

The full Math on the Level program consists of 7 spiral-bound volumes: Overview and Record Keeping, Math Adventures, Math Resources, and the four teaching guides--Operations, Money and Decimals, Fractions, Geometry and Measurements. Overview and Record Keeping explains the program, answers frequently asked questions, and contains all of the

record keeping forms you will need to implement the program. The four teaching guides provide explanations on how to teach each concept covered in the program. They also contain a sampling of 5-a-day problems you will give your child for review each day (more on this later). Math Adventures is a volume full of practical ideas on how you can incorporate math into daily life, and Math Resources contains additional teaching information such as a math dictionary, templates for writing word problems, and a section on charts and graphs.

Each day you are “doing math” with your child, you will be teaching a concept, either through a math activity or direct instruction. In addition, your child will have a 5-A-Day sheet to complete. The problems on the 5-A-Day sheet are review problems of concepts your child has already mastered, and are designed to move newly learned concepts from the short term to long term memory. 5-A-Day problems are located in the back of each teaching guide, but you will probably need to supplement these problems with some of your own also. On busy days, you may only have time to give your child a 5-day-page to review.

Here is a basic overview of how the program works. In the front of the record keeping binder is a master concept sheet. It lists all of the concepts that are covered in the program; each concept is numbered. At the top of the sheet are columns for you to write in the names of your children that are using MOL. When you begin using the program, you first have to figure out what your child already knows. You look through each concept one-by-one, and if you are confident that your child has mastered that particular concept, you check it off. You do this for each child. The concepts that are not checked are concepts that you need to teach. This step took me a couple of weeks to work out for 3 kids. I wasn't always certain which concepts were actually mastered. They may have been taught at some point, but that didn't mean they were ever mastered.

After determining which concepts have been mastered, you then go through your concept list, and choosing from the concepts your child has NOT mastered, you decide which concept you would like to teach your

child next. Listed next to each concept on the concept chart is the volume and page number you are to refer to teach that concept. You then turn to the appropriate page and use the teaching ideas to teach the concept. Whenever possible, ideas for using manipulatives are suggested and using math activities in daily life is strongly encouraged (Math Adventures is full of ideas). You work on teaching and reinforcing this concept until it is mastered. The author suggests not teaching more than two new concepts per week, and I have found that to be a good guideline, but not an absolute. As new concepts are mastered, they are checked off on the concept sheet.

You then need to schedule each mastered concept for review. When a concept is newly added to the concept sheet (i.e., mastered), you will want to review it daily or every other day for awhile. Gradually, the number of days between reviews will increase (once again, this is your decision), until your child is only reviewing it every 3 weeks. How exactly are all of these review problems scheduled? Well, the record keeping binder gives very specific instructions on how to do this scheduling by hand on the scheduling sheets. It is far easier, however, to use the computerized automated scheduling sheet that comes with the program. It really couldn't be easier. Once a concept is mastered, the concept number is entered on the spreadsheet, and the name of the concept (i.e. dividing by fractions) automatically fills in. You then enter how often you want to review the concept: every day, every second day, once a week, twice a week, or once every 3 weeks). Once you have entered that, the calendar grid of dates automatically fills in which dates that concept will be reviewed. You enter all of the concepts in this way, and the spreadsheet automatically adjusts the dates of all of the concepts. As new concepts are entered on the spreadsheet, it automatically adjusts the review dates of all of the concepts.

Then, when I want to schedule a 5-A-Day sheet for a certain day, I go to another page on the spreadsheet, enter the date, and it brings up the concepts that were automatically scheduled to be reviewed that day, as well as the volume and page number where the 5-a-day problems are

located for that concept. For each concept that is scheduled to be reviewed, I write one review problem for the child. Sample 5-A-Day problems are listed in the back of each of the four volumes. There is roughly one page of 5-a-day problems for each concept. I have not found this to be enough, so I refer to old math books I have around the house to come up with additional problems.

The 5-A-Days are so-called because the child is supposed to have 5 review problems scheduled each day. My children are older, and have mastered many concepts, so we always have more than 5 concepts turning up on the schedule each day. Some concepts can be combined into one review problem, however. For example the concepts Perimeter of a Closed Figure and Adding 3 or More Numbers can be combined in one problem. That being said, my children usually have between 8 to 10 problems, not 5, on their 5-a-days each day. The authors have made combining easy by listing which concepts a given concept can be combined with to decrease the number of problems given each day.

When I first sat down with this program, I will admit I was a bit overwhelmed. It took me awhile to wade through the program and figure out what was what. After I got my bearings, though, it wasn't difficult at all to actually implement the program. The time we spend on math each day has decreased, and I think my children are actually enjoying it more than they have in the past, partly because they are not overwhelmed with a bunch of workbook problems every day.

We have been using Math on the Level for 12 weeks now, and I plan on continuing to use it. I love that it is a one-time purchase that I can use with all of my kids through 8<sup>th</sup> grade. The full program costs \$295, but when I think of what I have already spent over the past 11 years on math curricula, this seems like a good investment (there is also an option to buy a "starter set" or to purchase the volumes individually—see website). The authors do offer a 60-day trial period, so if you find it really doesn't work for you, you may return it for a refund. You do not have access to the automated

scheduling sheet during this trial period, but are given permission to copy the printed planning sheets for you use.

I also love that there are no grade levels associated with any part of the program. A child who is not at typical grade level in math will not feel stigmatized using a math book several grades lower. Really, the focus of this program is finding what your child is developmentally ready for math-wise and plugging him in there and working at HIS pace. The result is a child who has more positive feelings toward math and ultimately does better in math as well.

I am very enthusiastic about this program, but there are some caveats. It definitely is not for everyone. While it probably would work for every child, it will not work for every parent. Math on the Level requires some preparation time and planning, unlike other math programs. I spend approximately 30-40 minutes each evening writing up 5-A-Days for my 3 kids, and I also occasionally, but not often, spend extra time reading over and planning out my teaching time. (The author does suggest that you photocopy some of your 5-A-Days so that when you don't have time to make one up, you have one ready to go). If you know that it will be difficult or unlikely for you to invest this time, then MOL may not be for you.

While using Math on the Level, you need to be disciplined and teach the concepts that you don't particularly like teaching. For instance, I really don't like geometry or teaching geometry, and I have noticed my tendency to avoid teaching those concepts. Because of the lack of structure in Math on the Level, if you are not disciplined in teaching areas YOU dislike, your child may end up having some "gaps".

I really wish Math on the Level had been around 11 years ago when I began homeschooling—there is a diminished atmosphere of stress surrounding math in our home now, and I would have saved so much money as well! If you are dissatisfied with your current math program, or are just starting out with a little one, please consider giving Math on the Level a try. I think you will be glad you did.