

Suggestions for Success

#1 Make the curriculum work for you and your child.

Use the textbook in whatever way best enables your child to learn successfully. The format is intended to be flexible. For example: If a lesson is too long for your child, or he is having trouble completing it, assign it over two days instead of one. If a lesson is too short for your child, you might allow him to go on to the next lesson the same day (assuming he correctly completed the first lesson), or in some cases, you may even wish to assign a lesson to be done twice in the same day (*particularly* those in which a child is copying math facts for the purpose of memorization). We do not suggest assigning *more* than two lessons in a given day, however, because attentiveness and carefulness will tend to wane. It is possible to have an older child work on two units simultaneously (doing one lesson from each), but only do this if it seems to work for your child.

One of the main purposes in keeping the lessons brief is to encourage the child to apply himself and do well and be rewarded for it by having time to do something other than seatwork. The curriculum has been designed with the assumption that a child will complete at least one lesson a day and repeat that lesson as many days as it takes to master it. If your child is consistently breezing through math, never making mistakes or finding himself having to repeat lessons, or if the lessons don't seem like "enough" to you, his ability may be beyond the scope of this volume (or at least beyond the scope of the unit he is currently working in).

Keep in mind that these lessons will seem short compared to traditional textbooks. Remember, however, that those texts are designed to keep children occupied for at least forty-five minutes at a stretch and often include material to be completed as homework besides. This text is designed specifically for the homeschooling family that wants to teach their children math incrementally and thoroughly, but in such a way that the most precious commodity they have – time – is still available to be spent in other more eternally valuable pursuits. You will also notice that some lessons have only half a dozen or so problems; this generally occurs when new ideas are being introduced. It is assumed that the child will spend longer on the reading/study portions of these lessons; thus, the written work is brief as an encouragement to take the time to understand the new concept.

If a child has had to repeat a lesson many days and is becoming discouraged, you may choose to allow the child to use helps to complete the problems (such as counters, a hundreds chart, or math fact tables); just be sure to revisit the material at a later time so that it can be mastered without the helps.

For example, one of our daughters became completely stuck while trying to learn the multiplication tables. We had her do a lesson copying the given fact family twice a day for many days, had her use some flashcards for extra practice, and even had her trace the math facts with her finger on the tabletop, but nothing seemed to make them stick. Finally, knowing that she was becoming discouraged at not moving on, we decided to allow her to progress to the higher fact families, still copying a given set twice for a set number of days, then using a copy of the math fact table (see *Teaching Helps*) to look up answers when she came to a review page or more advanced problems.

The same method will work for any of the four operations units. This way a child can continue to learn and practice new concepts even if he has not mastered math facts yet. As a child is working through longer and larger problems, he will still be gaining practice with the math facts

FAQ:

Where do I start my child in this series if my child has already had some schooling?

We would recommend conducting informal placement testing to find the unit that your child needs to work on. Sit down with your child and assess his skills. Use the math fact tables for the four operations to quiz his understanding of each of those (choose random problems *from one operation at a time* beginning with addition). Is there a set he doesn't know? If so, you have a unit to begin with. Does he know them all? Then he is probably going to need to place midway through a unit and work on higher skills such as carrying in addition, borrowing in subtraction, and completing longer problems in multiplication and division. Use the chart below as a guide to choose his first unit and the starting point within it. When he reaches a point where he either finishes that unit or cannot go any further in it, then he will go on to the next unit in the list of suggested study (see #4 in Suggestions for Success or consult the order in chart below).

Begin at Working w/ Numbers I	for 0-100, counting by 2, 5, 10, 100, odds/evens, before/after...
Begin at Addition, Lesson 1	if your child needs to learn the addition fact families
Begin at Addition, Lesson 30	for basic addition problems, multiple digits, first word problems
Begin at Addition, Lesson 43	if your child is ready to learn about carrying
Begin at Subtraction, Lesson 1	if your child needs to learn the subtraction fact families
Begin at Subtraction, Lesson 31	for basic subtraction problems, multiple digits, first word probs.
Begin at Subtraction, Lesson 45	if your child is ready to learn about borrowing
Begin at Multiplication, Less. 1	if your child needs to learn the multiplication fact families
Begin at Multiplication, Less. 44	if your child is ready to learn about carrying in multiplication
Begin at Division, Lesson 1	if your child needs to learn the division fact families
Begin at Division, Lesson, 43	if your child is ready to learn long division
Begin at Review unit, Lesson 1	for a comprehensive review of all four operations
Begin at Working w/ Numbers II	for place values, Roman numerals, timelines, graphs, mixed ops.

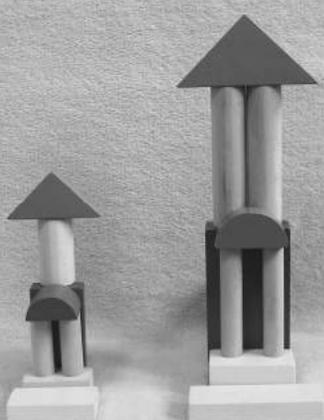
My child is taking forever to get through the Subtraction Unit (or some other unit). What should I do?

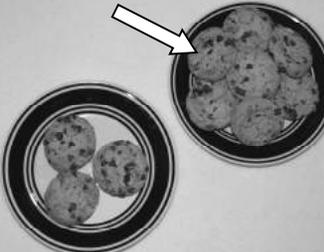
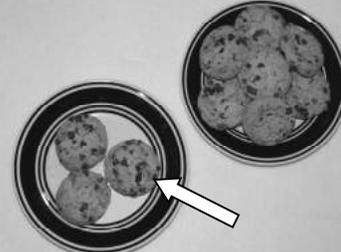
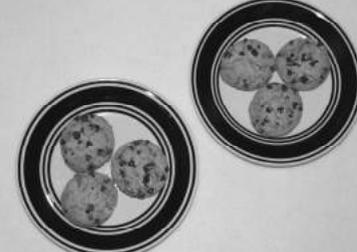
What's the hurry? If your child is truly stuck and unable to advance even with helps like the hundreds chart, counters, or fact tables, consider moving to a different unit, so that he will not become discouraged. Then plan to revisit this unit at a later time, picking up near where he left off. But if he is making consistent progress, just not at the speed you were envisioning, let him keep going. Every child is different, and the goal should be to learn the skills well (not to learn the skills faster than the neighbor's child). You don't need to push your child to catch up with anyone else, nor do you need to hold him back from getting ahead of his siblings. A child should be encouraged to progress through the units at his own pace.

Am I really supposed to make my child repeat entire lessons? [See note on Simple Grading System]

Absolutely. The reason this one set of units will last so many years of math instruction is that lessons will frequently be done two or more times. For example, if a child is working on a lesson for long division and gets two wrong, he should correct them immediately. Then the next day he should do the whole lesson again. If he gets only one wrong that day, he is still not ready to go on.

Comparisons

		
	<p>short / long</p>	
		
<p>short / tall</p>	<p>narrow / wide</p>	<p>little / big</p>

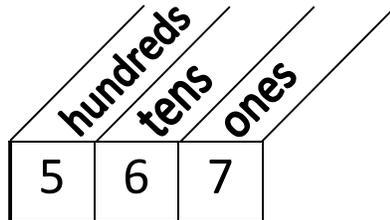
		
<p>small</p>	<p>smaller</p>	<p>smallest</p>
		
<p>large</p>	<p>larger</p>	<p>largest</p>
		
<p>more than (most)</p>	<p>less than (least)</p>	<p>equal to</p>

Coins

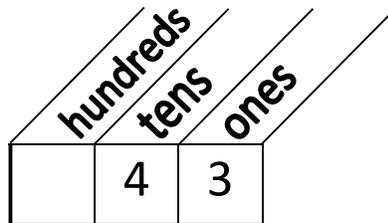
		<p>PENNY</p> <p>A penny is worth ONE CENT.</p> <p>Front: Abraham Lincoln Back: Lincoln Memorial or Union Shield Color: coppery</p>
		<p>Count pennies by ones like this: 1¢, 2¢, 3¢, 4¢, 5¢, ...</p>
		<p>NICKEL</p> <p>A nickel is worth FIVE CENTS.</p> <p>Front: Thomas Jefferson Back: Monticello Color: silvery</p>
		<p>Count nickels by fives like this: 5¢, 10¢, 15¢, 20¢, 25¢...</p>
		<p>DIME</p> <p>A dime is worth TEN CENTS.</p> <p>Front: Franklin D. Roosevelt Back: olive branch, torch, and oak branch Color: silvery</p>
		<p>Count dimes by tens like this: 10¢, 20¢, 30¢, 40¢, 50¢...</p>

What Is Place Value?

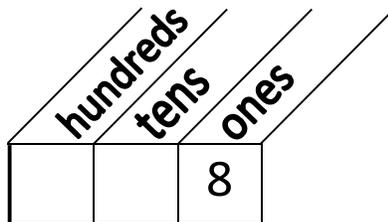
Each digit of a number can be described by its place in the number. For example, in the number 567: the 5 is in the hundreds' place, the 6 is in the tens' place, and the 7 is in the ones' place.



In the number 43: there is nothing in the hundreds' place, the 4 is in the tens' place, and the 3 is in the ones' place.



In the number 8: there is nothing in the hundreds' place, there is nothing in the tens' place, and the 8 is in the ones' place.



When we refer to a digit as being in the ones', tens', or hundreds' place, we are stating the **place value** of the digit.

The position of each digit tells how much value that digit contributes to the total value of the number. To see how this works, look at the following:

Addition/Subtraction Tri-Corner Flashcards

1 2	1 4	4 1	0 6	0 0
4 2	5 1	3 7	6 0	0 1
4 2	1 9	6 0	8 3	2 0
6 3	7 1	5 6	8 0	2 3
6 2	1 8	8 1	2 5	4 0
8 5	6 7	7 3	1 2	4 5

Index for All Units

A

AD..... N95, N99
Addend..... A7
Adding four-digit numbers.....A67, A81
Adding four one-digit numbers..... A38
Adding from the right A40
Adding long numbers..... A96
Adding three-digit numbers.....A47, A81
Adding three one-digit numbers..... A36
Adding two digits to one digit..... A40
Adding two-digit numbersA45, A79
Addition defined A7
Addition facts, 0's A8
Addition facts, 1's A9
Addition facts, 2's A11
Addition facts, 3's A12
Addition facts, 4's A16
Addition facts, 5's A17
Addition facts, 6's A21
Addition facts, 7's A22
Addition facts, 8's A27
Addition facts, 9's A28
Addition facts, all App#5
Addition facts, timed R7
After W17, W29, W65
And W62, N15
Arabic numbers.....N58
AverageN84
Axis..... N114, N125

B

Bar graphsN114, N119, N121
BC..... N93, N99
Before..... W15, W27, W63
Before and after..... W31, W67
Bills..... P#14
BimodalN82
BorrowingS55, S59, S70, D62
Borrowing from zero(es)..... S63, S65, S74, S77

C

Calendar P#11, App#2
Capacity..... P#6
Cardinal numbers..... W81

Carrying A53, A58, M51, D81, D90
Carrying a 2A79
Carrying a 3A80
Carrying into hundreds' place..... A56, M53
Carrying into thousands' place.....A64
Celsius P#12
CertificatesApp#13
Checking addition.....A92, A94, A98, S104
Checking division..... D113, D119
Checking multiplication..... M114, M119, D115
Checking subtraction.....S100, S102, S107
ClocksApp#1
Coins..... P#4, P#13
Colors P#2
Comma placement
..... A64, S70, M61, D99, N7, N15
Commodity money..... P#14
Commutative property of additionA10
Commutative property of mult..M12, M19, M58
Comparisons..... P#5
Counting P#1, P#4, W14, W26
Counting by fives..... P#4, W54, M18
Counting by hundreds.....W58
Counting by tens P#4, W56, M32
Counting by twenty-fivesP#4, W56
Counting by twosP#4, W50

D

Demi- (prefix)N61
Difference..... S7
Difference, less than divisor.....D51
Digit W12, W13
Divided by..... D9, D118
DividendD7
Dividing four digits by four digitsD104
Dividing four digits by one digitD99
Dividing four digits by three digitsD105
Dividing four digits by two digits.....D99
Dividing long numbersD116
Dividing three digits by one digit D58, D61
Dividing three digits by two digits..... D74, D87
Dividing two digits by one digit..... D49, D51
Divisible (by two).....W52