

ARITHMETIC INSTRUCTION MANUAL

To: All Parents of Students in K and Gr.1

Re: Arithmetic

Even arithmetic, when presented in a systematic, orderly manner, can show forth to your child the goodness of God, as it reflects, in a small, yet true way, the orderliness of His Creation.

We have found that in order to present the arithmetic in an orderly way, and to have the children learn and retain, we must begin with a definite plan, then lay a foundation and build upon it, brick by brick.

The methods we use are not new, but we have searched in vain for a first grade book-in print- which uses these methods and presents the material in what we feel is a systematic way. Consequently, over a period of three years, with experience and study, we have outlined our presentation and compiled our own accompanying drill sheets.

New facts are presented gradually and drilled under supervision, while previously learned material is being continually reviewed on the drill sheets. The drill sheets do not consist of random numbers,

but have been carefully planned to include -- every few days -- all those arithmetic facts which the children have learned.

Some children learn arithmetic quickly but also quickly forget. This method is designed to give them an optimum of review so they may retain what they have learned. Some children are slow in learning arithmetic and they are carried along successfully by our very gradual presentation and, when necessary, extra oral drill work at home. Some children are naturally gifted in arithmetic and they find it exciting to be timed on our oral drills and see if they can 'beat' their own speed. Nearly all of the children seem to enjoy our oral story problems and chalkboard picture problems, which increase their interest in arithmetic and give them a better understanding of the concepts involved.

We hope that your child will have success and enjoyment from this program and that you will be pleased with his progress. May this be for the greater Honor and Glory of God and under the protection of His Holy Mother, Mary!

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SECTION 1. YOUR HANDBOOK:

The following instructions are written to share with you the methods I have found to work most effectively and the reasons I have used them. I suggest that you read these instructions before beginning the program and then read them again at regular intervals. Even after having developed this program myself, I find that periodically re-examining my procedures, and reading my notes, helps to refresh my mind. Please keep this manual in a convenient place and refer to it frequently.

May God and His Holy Mother bless you with present success and with eternal joys.

SECTION 2. THREEFOLD PLAN:

“We must begin with a definite plan, then lay a foundation and build upon it, brick by brick.” That was one of our statements in the Letter to Parents regarding arithmetic. The plan is the outline, which will be found in the daily lesson plans, the presentations and drills are the bricks and the Drill Pages and Review Pages form the mortar which holds the bricks together.

Our outline, oral instruction, and drill sheets are interdependent, and one cannot be neglected without jeopardizing the whole program. Please do not let a child look at the tests in advance, or work ahead on the drill sheets, going ‘at his own pace’. In exceptional cases (e.g. a student who has been held back a grade or one who has been ill), you may obtain permission from the school to go more rapidly through the whole arithmetic curriculum. This would only be workable as long as it is done according to the same basic plan; in other words, the outline would simply be accelerated, using the same drills, followed by the same seatwork and tests.

SECTION 3. COUNTING, WRITING, AND IDENTIFICATION OF NUMBERS:

“A hamburger is a very personal thing,” I once heard someone say. She meant, I presume, that everyone has his own preferred cooking method, garnishes and condiments. I feel that teaching a child his numbers is a similarly personal thing. By this I do not mean the number facts and combinations (as two plus two, three minus one, etc.), but rather the learning of the individual numbers, how they are written, their order and what they represent.

Although I do not feel I can, or should give you a pat formula for teaching the numbers, I will give you some pointers to bear in mind when teaching this - the foundation of arithmetic knowledge.

General: Always introduce only a few numbers at a time, building on them by gradually introducing more. Remember to review daily as you proceed.

Counting: Teach the child to count objects, not just numerals or rote counting. Teach him to count objects systematically, so that he will not lose his place and will learn how to be systematic. He should be able to find a given number of objects and also to draw a given number of objects. The drawing of objects can also be used as supplementary seatwork (See Section Nine).

Writing: Teach the child to write the numbers neatly and properly, starting in the right place and going in the right direction. He should learn to write the numbers independently in sequential order. He should also be taught to write the numbers in random order as you dictate them to him.

Identification: Be sure the child can identify the numbers in both sequential order and in random order.

SECTION 4. INTRODUCING NUMBER FACTS:

When we teach a child that “one and one are two”, we want him to memorize this number fact so well that he will remember it all his life, and that he can build upon it with other number facts. But it is equally important to convey to him the fact that these numbers stand for objects. In this way he can begin to grasp an understanding of arithmetic as a convenient and time-saving means of counting, and to appreciate the beauty of it as a tool to use in daily life. (Please be sure to mention that it is God Who gave us good minds to develop and use this tool.)

In introducing a new number fact, we usually begin with a story problem or a picture problem, then write the corresponding fact (and answer), having the child recite it, write it, repeat it. Repetition is the key to memorization. Visualization (through story and picture problems) is the key to understanding.