

# First Level Mathematics (KINDERMATH)

Pre-K through 1<sup>st</sup> grade



- *Provides a continuum of learning and management system that insure the early math concept development of participating children.*
- *Organization of curriculum facilitates use of program specialists, paraprofessionals, parents, and volunteers in the classroom.*

## Results



*As a result of participation in First Level Math, children in their first year of mathematics in rural, suburban, and small city communities made statistically significant and educationally meaningful gains relative to national norm groups on three standardized tests of mathematics achievement. These results were obtained from three different methods of program delivery during two different evaluation periods.*

## The Program

First Level Math (Kindermath) is a comprehensive program using concrete objects and actual physical operations to teach the fundamentals of mathematics to children in their first year of mathematics instruction. It provides a continuum of learning and a management system that insure the mathematics concept development of participating children.

The curriculum is based on knowledge of child development and cognitive growth. The learning objectives and the experiences used to reach them follow a hierarchy which begins with simple concrete classification based on physical properties. It then progresses through a series of 90 learning objectives to the higher level skills of addition, subtraction, and the use of symbols involved in arithmetic concepts. Teachers are trained to assess the various developmental levels of their students using a Curriculum-Based Assessment that is part of the program. The results of this are used by teachers in presenting experiences to students in developmental sequence. Understanding takes place through assimilation and the use of concrete objects, rather than abstractions and rote memorization.

Objectives are organized around miniature lesson plans, complete with materials, procedure, and evaluation. Instruction takes place usually in small groups for periods of approximately 20 minutes each day. There is also much daily opportunity for self-initiated activities. First Level Math's approach to teaching math is totally consistent with the Curriculum and Evaluation Standards of the National Council of Teachers of Math. The program has been designed to be used by both regular and special education teachers. Because it is available in Spanish, it is also appropriate for use in bilingual and ESL programs. It has been widely replicated in urban, suburban, and rural settings throughout the State and nationwide.

## Professional Development

Training is conducted in keeping with district/school needs and is designed to give teachers a complete orientation to the program and to provide experience in its use. One full day is recommended. Paraprofessionals and program specialists who may assist with the program are encouraged to participate in the training. Follow-up/technical assistance is available in the form of site visits, conference calls, and videos.

## Costs & Funding Options

One curriculum and materials kit is required per classroom at a cost of \$175 per kit. Materials are non-consumable. Training workshops, including training materials for all participants and presenter's honorarium, cost \$500 per day. Assistance to replicators in securing funds is also provided.

## Learning Standards

**Mathematics, Science and Technology: 3)** understand mathematics and become mathematically confident by communicating and reasoning mathematically, by applying mathematics in real-world settings, and by solving problems through the integrated study of number systems, geometry, algebra, data analysis, probability, and trigonometry.

## Contact

Mary A. Felleisen  
Director  
Primak Educational  
Foundation  
P.O. Box 701  
Devon, PA 19333  
800-444-5729  
Fax: 610-644-6789  
E-mail: MAF4Access@  
aol.com