



Cuisenaire Manipulative Starter Kit

Barbara Ridener

All this and a handy carrying case too... That is how I usually end a description of the Manipulative Starter Kit from the Cuisenaire Company. Its wide range of manipulative contents are accompanied by an activity folder which makes the kit a useful tool for preservice as well as inservice teachers.

The contents of the manipulative kit include materials for individual as well as whole classroom use. The kit includes two sets of overhead pattern blocks, transparent color chips, and base ten blocks for the overhead. Also included are a set of Cuisenaire rods, a geoboard with colored bands, one tangram set, fraction circles, colored cubes, and two colored counters. Two mirrors, four overhead spinners, and six dice complete the set. The kit also contains *Start with Manipulatives*, a teacher resource notebook with activities by Rosamond Welchman-Tischler.

In a preservice methods classes, the kit can be used to provide the preservice teachers with an understanding of how and why manipulatives are used in elementary school classrooms. Although many universities have supplies of manipulatives, personal kits can be used within the university setting and then taken home where the preservice teachers can practice the activities and explanations with the same resources they used while in the classroom. Further, once the preservice teachers are comfortable with the manipulatives in the kit, they often implement these manipulatives during their preservice field experience. In fact, it is during this time that the preservice teachers often see the value of the kit. On many occasions I have observed preservice teachers instructing a small group with the help of the manipulatives contained in the kit. When they see the difference it makes in their students' understanding of the

mathematical concept, they truly appreciate the use of the manipulatives in the instruction of mathematics. Many have expressed a wonder of why these materials were not around when they were learning mathematics because not only do they see positive results from their students, but many of the preservice teachers begin to understand the mathematical concepts behind the algorithms, some for the first time in their lives.

It is not only with preservice teachers that I have used the kit successfully. I have also used the kit with inservice teachers. The needs of inservice teachers differ from those of the preservice teacher. These individuals are often searching for "practical" activities that they can implement into their classrooms with little additional effort or resources. Another problem facing some of the teachers is

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the limited amount of manipulatives available to them at their schools. The kit provides these teachers with a broad base of activities and materials. Each of the materials within the kit has an accompanying section

within the resource book. This provides the inservice teachers with meaningful activities for each of the manipulatives at their disposal.

The resource book is divided into 13 sections. After an introduction which provides a rationale for the use of manipulatives in teaching elementary school mathematics, the book contains a section for each of the manipulatives included in the kit. Each section begins with an introduction to the manipulative followed by a brief description of the activities included for that manipulative. Also within the introduction are some informal experiences that the teacher could provide for the student with the manipulative and a list of references from which the teacher can find additional activities. Following the introduction are the activities. Each activity contains instructions, a discussion of the mathematical potential of the activity, and directions and ideas for use within the classroom. All diagrams are reproducible making the manipulative kit and resource book a complete package for the teacher. After inspection

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of the kit and practice with several of the activities, I have had several inservice teachers interested in the kit for use within their own classrooms.

The kit does contain a wide range of manipulatives and accompanying activities. But it is limited by the types of materials included. Although some of the materials are made for overhead use, not all of them are. I can not help but feel that the kit would be even more useful and valuable if the Cuisenaire rods and the geoboard were also made for overhead use. When materials are limited, it is often advantageous to have the greatest flexibility possible.

Although the kit contains some wonderful materials and activities, it is not amazing by itself. The most important ingredient is the teacher who uses it. Although the manipulative kit provides the tools, the teachers are the ones who must understand each activity or manipulative used and present and explain them to their students in meaningful ways. It is the teachers' excitement about mathematics that is necessary to spark similar excitement within their students.