

HOMESCHOOLING GIFTED STUDENTS:

Stimulating High Levels of Creative

Thinking and Problem Solving in the Home

Upper Elementary through Middle School

(ISBN 0-910609-59-4)

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By

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Dedicated to
Lurline Cummings,
who has been an ongoing
inspiration to me

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TO THE PARENT

This book is being offered because there is a scarcity of materials for encouraging creative thinking and problem solving for homeschooling gifted students. The emphasis here is upon independent thinking on the part of the gifted student. A self-evaluation section is provided at the back of the book to help the student to assess her or his responses. In some cases I provide answers and in other cases I offer guidance, tips, ideas, and examples. So in a real sense the book is the student's, not something simply to be completed and submitted for grading. This feature alone should appeal to the student.

As I see it, there are distinct advantages and disadvantages to homeschooling and classroom schooling. One of the great advantages of homeschooling is flexibility in scheduling. Daily schedules can be easily altered. Field trips and explorations can be arranged spontaneously, and there aren't the considerations of rules and regulations regarding transportation and supervision that the public classroom teacher must consider. For an inquiring and imaginative student, lessons can be wide-ranging.

Another of the differences in the two situations can be found in the area of evaluation. In general, the classroom student is subject to tests from the teacher, the school district, the state, and national assessment agencies. In contrast, the homeschooled student is examined by the tests that are part of the prescribed curriculum and by the periodic tests administered by a public agency (a school, school district, or a county agency). In essence, there is more opportunity for self-evaluation in the homeschool setting because external evaluation is less frequent and less threatening. The homeschooled student can go at his or her own pace, and is able to repeat, if necessary, lessons of knowledge or skill when needed. And, obviously, the homeschool student does not have to go at a pace determined by other students, as do most classroom students. If the material is easy, the homeschooled student can tackle it quickly and go on to a higher or deeper level.

How does creative thinking fit into all of this? Well, let's look at the conditions that allow for creative thinking to occur. First of all, there needs to be a feeling of exploration and experimentation. Both the parent and the classroom teacher are capable of setting this kind of atmosphere. Second, along with a spirit of exploration and experimentation, evaluation should be deferred. Premature evaluation will stifle creativity. That is not to say that there should be no guidance by the parent, but in cases where the student is trying out ideas he or she should not be constrained by evaluation in the early stages of creative thinking, nor be concerned about gaining

approval or rewards. Third, there should be sufficient resources with which the student can develop his or her ideas, whether in the form of materials such as paper, pencils, pens, charcoal, clay, and paint or reference books, periodicals, and computers. Fourth, there should be a sufficient warm-up leading into a creative thinking activity to enable the student to become intellectually and emotionally engaged in it. If these four principles of setting the stage for the promotion of creative thinking can be followed, the homeschooled student should be able to produce ideas that are original to her or him.

The activities that follow are meant to facilitate creative and critical thinking in gifted students of ages ten through thirteen. Obviously all of them won't appeal to every student, but we trust that many of them will strike a spark and spur some original thinking and doing.

TO THE STUDENT

The activities that follow are meant to be engaged in only by you, with a minimum of supervision. All of them call for some degree of independent thinking on your part. In order for you to get an indication of how well you have responded to the questions and directions, a self-evaluation section is provided at the back of the book. There you will find answers, tips, examples, and guidelines for the activities. Although I consider the answers to be correct, you may have better ones. If so, please let me know.

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ACTIVITY 1 (Mathematics)

MEMORABLE NUMBERS – Applying basic arithmetic operations



- A. Are you good with dates? Some people have a knack for remembering the dates of historical events or the dates of important happenings in their lives. Other people have trouble keeping track of any dates. They forget them or get them mixed up. There are mnemonic devices for helping anyone remember dates and other numbers, but most people don't remember to use them!

One way to remember something like a telephone number is to find relationships among the numerals. For instance, a phone number such as 345-6789 is very easy to remember because the numerals are in consecutive order. Businesses try to make certain that they have telephone numbers that are easily remembered. A great number of businesses, agencies, and associations rely upon the letters on the dial of the telephone to help people remember their numbers, and so they tell people to dial something with a word that characterizes them (800-CRANKIT for a car battery company and 485-BIRD for the Audubon Society are examples). Name at least three other businesses or agencies that use that technique of helping people remember their numbers. Give their telephone numbers.

- 1.
- 2.
- 3.

- B. Devise a seven-digit telephone number that is easy to remember because it illustrates the operations of addition and/or subtraction.
- C. What operations does 465-7687 represent?
- D. Is it possible to have a seven-digit telephone number that represents the operations of multiplication or division?

About the Author

R. E. Myers has been a middle-school teacher, film maker, educational researcher, and curriculum specialist in California, Oregon, Minnesota, and British Columbia. Prior to entering the field of higher education, he began writing curriculum materials that featured creative thinking. The earliest of these were called Ideabooks and were written in collaboration with E. Paul Torrance. The most recent have been *Writing a Personal Essay* (Teaching and Learning Co., 2008), *Time to Write* (Good Year Press, 2006), *Figures of Speech* (Teaching and Learning Co., 2008) and *Respect Matters* (Good Year Press, 2006), which won the Teachers Choice Award of 2007. His previous book with Gifted Education is entitled: **Golden Quills: Creative Thinking and Writing Lessons for Middle-School Gifted Students** (2008, ISBN 0-910609-56-X)

Between those publications, Dr. Myers wrote and produced "Feather," which won the CINE Golden Eagle award, and co-authored with Dr. Torrance *Creative Learning and Teaching*, which was named a Pi Lambda Theta Book of the Year in 1971.

Dr. Myers taught gifted students for many years, and he still is in touch with a dozen or so of the brightest of them. They include an artist, a research professor, a lawyer, an actor, a forest ranger, a foreign service officer (who is also an author of science-fiction books and short stories), a carpenter, and an electronics inventor.