

Monthly Newsletter— April/May



KUMON MATH AND READING CENTER OF LAFAYETTE

Volume 1, Issue 2

April, 2008

Students Working Hard and Advancing

March and April passed by quickly and many of our students have worked very hard to move up one level in their study plan. Congratulations to all of you and keep up the good work. In the past two months, we have quite a few students moved from Level I to J in Math. In preparation for pre-calculus, Level J is a challenging Level that deals with more advanced factorization built from the learnings gained from Level I. Excelling in this level is essential to help students to master the fundamentals of Algebra in preparation for high school Math. For more information about studying towards higher level math, see the following articles attached to this newsletter.

Check out our NEW Website!



Our website is up and running! Please visit us at www.kumonlafayetteca.com.

Here you will find:

- Center Information (hours, location, services)
- Contact Information
- Monthly Newsletters
- Calendar of Events
- Study Level Descriptions
- ...and much much more

We are continuously looking for opportunities to improve our website and would like you to take part in making this site work for you. Please send us an email at wilsontang94549@yahoo.com with your suggestions and comments.

Keeping in Touch by E-News

Thanks again for all the parents who provided me with e-mail addresses. This will help us tremendously in providing you with the latest information and updates. In an effort to keep the center green, future newsletters will be published online. The e-newsletter will be in PDF. Adobe Acrobat Reader is required to open our online publications and is available on our website for download.

Reminders

- **Picking up Homework** – Please call before center hours at 284-9038 to make arrangements for pick-up. Homework requests made during center hours may not be ready for same day pick-up.
- **Keep time** – work sheets without time cannot be evaluated. This may lead to unnecessary repetition of the work pages. Please be sure to keep time.
- **Complete Worksheets in Order** – Please do not complete worksheets out of order. If you cannot complete the assigned worksheets, start from where you left off the next day. Bring incomplete worksheets back to the center.
- **Summer planning** - Please pickup and complete a summer scheduler form at the center or download one from the website. This will help us schedule your summer workload.

Coming soon

- MORE BOOKS IN THE REFERENCE LIBRARY AND SUPPLEMENTAL READING PROGRAM
- NEW JUNIOR KUMON READING FLASH CARDS
- SUMMER VACATION WORK SCHEDULER

Achievement

LEVEL COMPLETION IN READING

- SOPHIE BISHOPP
- BRIAN CHEN
- LUC & MARC DAVIS
- JACKIE GEANNACOPOLUS
- DENNY HUANG
- YOSHIHIRO KOYAKE
- LIV, JOHN AND WILL LAGOMARSINO
- DERICK MARGERUM
- KATE MATSUNAGA
- LAUREN MELLO
- ERIC ROGERS
- JOCELYN SCHEONHOLZ
- ANISH VISH
- STEPHANIE WU
- ANDREW & DAVID YOO

LEVEL COMPLETION IN MATH

- MOLLY ARMSTRONG
- LAUREN & SOPHIE BISHOPP
- LUC & MARC DAVIS
- RYAN DEVRIES
- SOPHIE DOUGLAS
- ZIHENG FANG
- JULIA FELLOWS
- ERIN & SAM FILEDS
- JACKIE & NICKOLAS GEANNACOPOLUS
- SAMMY GIRARD
- WILL HIRSCH
- JACK HOOD
- JERRY LIU
- JOHN LAGOMARSINO
- AVERY LYON
- KEVIN MILLER
- ZOHAB RAEES
- KIRSTEN STENSLAND
- CAMERON & KELLY YOKOI

The New York Times

March 13, 2008

Panel Proposes Streamlining Math

By TAMAR LEWIN

American students' math achievement is "at a mediocre level" compared with that of their peers worldwide, according to a new report by a federal panel. The panel said that math curriculums from preschool to eighth grade should be streamlined to focus on key skills — the handling of whole numbers and fractions, and certain aspects of geometry and measurement — to prepare students to learn algebra.

"The sharp falloff in mathematics achievement in the U.S. begins as students reach late middle school, where, for more and more students, algebra course work begins," said the report of the National Mathematics Advisory Panel, appointed two years ago by President Bush. "Students who complete Algebra II are more than twice as likely to graduate from college, compared to students with less mathematical preparation."

The report, to be released Thursday, spells out specific goals for students. For example, it says that by the end of the third grade, students should be proficient in adding and subtracting whole numbers; two years later, they should be proficient in multiplying and dividing them. By the end of sixth grade, it says, students should have mastered the multiplication and division of fractions and decimals.

The report tries to put to rest the long and heated debate over math teaching methods. Parents and teachers in school districts across the country have fought passionately over the relative merits of traditional, or teacher-directed, instruction, in which students are told how to solve problems and then are drilled on them, as opposed to reform or child-centered instruction, which emphasizes student exploration and conceptual understanding. The panel said both methods have a role.

"There is no basis in research for favoring teacher-based or student-centered instruction," said Dr. Larry R. Faulkner, the chairman of the panel, at a briefing for reporters on Wednesday. "People may retain their strongly held philosophical inclinations, but the research does not show that either is better than the other."

Districts that have made "all-encompassing decisions to go one way or the other," he said, should rethink those decisions, and intertwine different methods of instruction to help students develop a broad understanding of math.

"To prepare students for algebra, the curriculum must simultaneously develop conceptual understanding, computational fluency and problem-solving skills," the report said.

"Debates regarding the relative importance of these aspects of mathematical knowledge are misguided. These capabilities are mutually supportive."

“In the language of cognitive science, working memory needs to be predominately dedicated to new material in order to have a learning progression, and previously addressed material needs to be in long-term memory,” he said.

The report also cites recent findings that students who depend on their native intelligence learn less than those who believe that success depends on how hard they work. Dr. Faulkner said the current “talent-driven approach to math, that either you can do it or you can’t, like playing the violin” needed to be changed.

“Experimental studies have demonstrated that changing children’s beliefs from a focus on ability to a focus on effort increases their engagement in mathematics learning, which in turn improves mathematics outcomes,” the report says “When children believe that their efforts to learn make them ‘smarter,’ they show greater persistence in mathematics learning.”

The report makes a plea for shorter and more accurate math textbooks. Given the shortage of elementary teachers with a solid grounding in math, the report recommends further research on the use of math specialists to teach several different elementary grades, as is done in many top-performing nations.

The report also recommends a revamping of the math content on the national assessment test, to focus on the same skills that the report emphasizes.

Here are the panel’s recommended benchmarks for elementary school math education:

Benchmarks in Math Education

Fluency With Whole Numbers

1 By the end of Grade 3, students should be proficient with the addition and subtraction of whole numbers.

2 By the end of Grade 5, students should be proficient with multiplication and division of whole numbers.

Fluency With Fractions

1 By the end of Grade 4, students should be able to identify and represent fractions and decimals, and compare them on a number line or with other common representations of fractions and decimals.

2 By the end of Grade 5, students should be proficient with comparing fractions and decimals and common percents, and with the addition and subtraction of fractions and decimals.

Many articles have been written about the benefits of the Kumon math program as it relates to helping with mathematics classes in school and with performance on standardized tests. While these are very important benefits of the Kumon math program, studying the high levels, especially above grade level, is the essence of the Kumon method. If a student works his/her way up to self-studying the Kumon calculus levels, the benefits he/she will reap are numerous.

When students begin the Kumon program (in any subject), they generally will show rapid improvement in focus, study skills, discipline, and self-confidence. Those skills will translate into students being able to tackle new concepts easily on their own. They also build up a solid foundation in the lower and intermediate levels of the Kumon program, preparing them for those challenging higher levels.

At this point, many people may still be wondering "Why should my child study higher level math?" There are many practical reasons for this, but first, let's talk about the goals of the founder of the company, Mr. Toru Kumon. Mr. Kumon's goal was not to develop mathematicians or scientists. His intention was to help students to excel in any area of study. It took Mr. Kumon's son, Takeshi, three years in the program to reach calculus while still in elementary school. Mr. Kumon believed that it was possible for any student to reach calculus.

In addition to Mr. Kumon's goals, here are some practical reasons for self-learning high level math (calculus) while in high school or earlier:

- Acquiring strong mathematical ability during school years leaves more options open in selecting a major in college and pursuing a career.
- Students will likely be able to take Advanced Placement math and math-related courses in high school, which give the opportunity to obtain college credits before entering college.
- In today's technology-driven society, having strong math skills is invaluable in the job market.

From Accounting to Medicine to Engineering to Architecture, math is everywhere in most every field. Some examples of real-life problems that concern us today, which would require high-level math to solve, are as follows:

- Finding energy alternatives to petroleum and fossil fuels
- Discovering new medicines to help people live longer, and cure and prevent diseases
- Building structures to withstand devastating natural disasters, such as floods and earthquakes
- Predicting movement of stocks and other securities in the financial markets

As children grow up, they will face many problems and will have to make decisions which require analytical thinking. Through long-term Kumon study, students will become self-motivated, independent problem solvers. Daily problem solving practice with emphasis on speed and accuracy helps to boost confidence and improve study habits. As Mr. Kumon stated, "by discovering the potential of each individual and developing his or her ability to the maximum, we aim to foster sound and capable people to contribute to society." Self-learning high level mathematics is a crucial element of this goal.