

MATHEMATICS, SCIENCE & COMPUTER SCIENCE UPCOUNTY CENTER PROGRAM



Roberto Clemente Middle School
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June 1, 2009

Dear Students and Parents:

We are excited that you will once again be joining us in the Math/Science/Computer Science Center Program at Roberto Clemente Middle School. We look forward to an exciting year in the SEVENTH Grade!

As we look ahead to continuing the pathway of rigor and enlightenment that began last year, please take a moment to get acquainted with your new teachers by reading their biographies. Please note your summer assignments are listed below from each teacher. Also, two marble composition books would be helpful for your World Studies and English classes.

Yours in learning,

The 7th Grade Upcounty Center Team

MATHEMATICS

Center magnet Algebra I&II- Ms. Benaë Gibson (Benaë_E_Gibson@mcpsmd.org)

Ms. Gibson earned her Bachelor of Science degree and Masters of Arts in Teaching Mathematics from California University of Pennsylvania. Ms. Gibson earned her second Masters degree in Curriculum and Instruction with Administration and Supervision Certification from McDaniel College. She has taught Math B, Math C, and Algebra I and II at Roberto Clemente Middle School since 2003.

Algebra I is offered to students who have demonstrated mastery of enriched Magnet Math 6. The units of study include sets, relations and operations, irrational expressions and equations, mathematical systems, functions, probability and statistics, polynomial functions, functions and relations of the second degree, solving systems of equations and inequalities, and exponential functions.

Geometry is offered to students who have demonstrated mastery of enriched Algebra 1 concepts. The units of study include geometry, exploring geometric relations and properties, logic and geometric proofs, right triangle relationships and coordinate geometry, similarity and trigonometry, measurement, circles, and patterns in geometry and algebra. The concepts of Algebra 1 are integrated throughout the course, as their

use is appropriate. The first unit of the course is The Foundation of Geometry, and it covers The Building Block of Geometry, Measuring Length, Measuring Angles, Geometry Using Paper Folding, Special Points in Triangles, Motion in Geometry and Motion in the Coordinate Plane.

Students should complete a preparatory math packet over the summer. You can download the packet from the web at www.robertoclementems.com. The summer packet is due the first day of school.

A graphing calculator is required for Algebra I courses. Our teachers use the TI-83+ calculator in the classroom, however, any graphing calculator which has a table of values function will be fine. Your teacher will be sending out forms at the beginning of the year if you need assistance with obtaining a graphing calculator.

CENTER COMPUTER SCIENCE

Edward Taliff, Ph.D. (Edward_M_Taliff@mcpsmd.org)

Dr. Taliff earned his bachelor's degree from Juniata College, his master's degree from Shippensburg State College, and his doctorate from Pennsylvania State University.

Getting Ready for Computer Science 7 Programming Class

Most students find it useful to have a USB storage device for school-to-home data transportation. If you rely on such a storage device, I strongly recommend that you frequently backup your files so that you will be able to restore your work immediately should your device malfunction or become lost. You do not want to miss a due date/deadline date as a result of a storage device snafu.

Things To Do Over The Summer: Think, Explore, and Consider!

I am not assigning a specific summer assignment. Also, please do not begin programming before we start class in late August.

CENTER SCIENCE

Mr. Gregory A. Young (Gregory_Young@mcpsmd.org)

Mr. Young is a thirteen year veteran of middle school science education and holds a Bachelor of Science degree in Middle School Science Education from the University of Kentucky. Mr. Young also holds a Masters of Arts in Education Leadership from Eastern Kentucky University.

Mr. Young joined the Clemente science team in 2002 and has taught various middle school science courses including 6th, 7th, and 8th grade science as well as Astronomy and Engineering.

The seventh grade center science course features a connected curriculum primarily in life sciences, but will also include a heavy emphasis in physical science and astronomy.

Some topics we will be studying include biological patterns and systems, a more in depth look (from 6th grade) into genetics, disease, light and sound as a function of waves, and the dynamics between the Sun and the Earth -- highlighting the analysis of the electromagnetic spectrum from deep space..

Summer Science Assignment

Students should read a science nonfiction book of their choice and complete a presentation assignment for that book. The assignment from the book is the initial research for the student's "traditional" science fair project that will be completed by January, 2010. The ability to take a testable question and perform an experiment using superior methodology is the key to success.

If you would like to look ahead at the required Montgomery County Science Fair Rules and Regulations, please check out the following website:

<http://www.sciencemontgomery.org>.

All students will be required to participate in a traditional science fair later on in the spring of 2010, but research for such a project should begin over the summer. The book of choice for the summer should help the students find or reinforce science topics that they are interested in, and may want to consider doing an experimental science fair project on later in the year. If they choose another topic for the science fair project, they will have that choice. However, they will have to read an additional book on their new topic of choice. So those students who may already have an idea for a science fair project will have a "leg up" on the year with this summer assignment.

Step #1: Go to library or choose a science nonfiction book of the students choice to read for the summer. Remember, the book is research for your science fair project this year so choose carefully and think of what you want to learn more about this year on your own.

Step #2: Read the book

Step:#3 Choose one of the two projects to complete from your book. Option #1 is a shortened version of the book. Imagine creating a "Cliff's Notes" version of the book that identifies and explains the most important sections. Option #2 is an artistic mobile that will creatively display the book's main theme with categorizing the most important sections.

If you have any questions about the projects, please email me at your convenience and I will respond within a week. Thanks for your time and dedication to your summer assignments. I look forward to working and learning with all of you this coming school year. The assignment will be due within the first two weeks of school.

OPTION #1

Make Your Own Book Summary and Review

Assignment: Design your own book review as a shortened version of your chosen non-fiction science book with a reflection at the end. This review must include the following requirements:

- 1) **Cover-** Design a cover with an illustration, title of book, author of book, and your name on the front.
- 2) **(Page #1) subject -** an initial paragraph on the general subject and any sub-topics of the book.
- 3) **(Page #2) 10 new vocabulary words –** name and define 10 new words that you learned from this science book. Include at least **3** illustrations or diagrams from this list of 10 words.
- 4) **(Page #3) summary -** your summary of what the author had to say about the subject. Again, pick only the most important points to discuss. For a science book or other subject, describe some of the main points made about the subject. If the book is divided into different chapters, you can often use those divisions as a guide to what the main points are.
- 5) **(Page #4) reflection -** After you've described your book, express some of your thoughts about what you've read. Some possible questions to reflect on are:
 - a) What seemed to be the author's main reason for writing the book?
 - b) What was the most interesting thing you learned about the book's subject?
 - c) Why did you find it interesting?
 - d) What did you think about the text features?
 - e) Did the author hold your interest?
 - f) Do you have any ideas about an experiment you could do on this subject?
- 6) **Conventions –** Make sure all writing is edited for punctuation, spelling, grammar, usage, capitalization, and paragraphing.

Remember! Whether you are writing about fiction or non-fiction you must be sure to recognize the main idea or ideas in the book. So be sure that you have a good understanding of it before you begin writing. Keep the book beside you while you are writing your report so that you can refer to it when necessary.

OPTION #2

Make Your Own Mobile

Assignment #1 – Read a Non-Fiction Science Book as Research for the Science Fair Project.

Assignment #2 – Organize Reading Into

- **Title of Book** –
- **Four Topics**–
 - **1 paragraph summary for each subtopic**

- **Identify and Plan out at least 8 graphics (2 from each subtopic)**
- **Sketch or Print 8 graphics**
- **Explain how graphic goes with subtopic**

Below you will find an example of a format you can follow for your mobile.

