

# The Montessori Lexis

March 20, 2009 The Montessori School of Bowling 515 Sandridge Road Bowling Green Ohio 419-352-4203

## This Week's Focus: Geometry...Early Childhood and Beyond

Maria Montessori believed that all humans are born with a "mathematical mind." From the very beginning in the preschool classroom, and continuing through the elementary classrooms, the students are introduced to mathematical concepts in concrete form. The geometry materials are an excellent example of this design. When a child holds the geometric solids or traces the metal insets, they experience, through their senses, concepts such as edges, faces and vertices. Montessori thought so much of geometry, that she devoted one of seven parts to it in *The Advanced Montessori Method* (Montessori, 1965).

In traditional schools, geometry is taught as an abstract series of formulas and theorems meant to be memorized by the student. In a Montessori classroom, the geometry curriculum uses concrete, sensorial experimentation to lead students to concepts. The focus of the geometry work is more on the process to discover how to find the answer rather than on the answer alone. Students gain understanding and develop a solid foundation in mathematics. Later, as they master the concrete they begin to move to the abstract, where the child begins to solve problems with paper and pencil. When children are given this solid, material foundation, they see the relationship of geometry and math to the real world.

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## **Refresh Yourself on Why MSBG Is The Right Choice For Your Child!**

MSBG will be having an Open House on Sunday, March 22nd from 12:00pm until 2:00pm.

Come see why the Montessori School of Bowling Green should be your #1 choice for education! As reported on a recent national standardized test, it is not uncommon for our students to perform several grade levels above their peers. Our environment is peaceful and tailored to the student's unique learning style.

Activities include:

- live demonstrations of Montessori manipulatives
- tours
- tables featuring our extra-curricular activities
- Q/A opportunities with the Executive Director and Board President

If you are still making your decisions for next year's enrollment, please stop by! Enrollment packets can then be turned in on Monday, March 23rd. If you know of another family that might be interested in our programming, please bring them along. This Open House is a continuation of our community outreach initiative at the Wood County Public Library last month. Please call the front office at 419-352-4203 if you have any questions.

## Montessori wins Ohio Chess Championship

The Montessori School of Bowling Green hosted the 2009 Ohio Elementary Chess Team Championship last Saturday in the Grand Ballroom of the Bowen-Thompson Student Union at Bowling Green State University. Two hundred sixteen students representing over 70 elementary schools from across Ohio participated in the event.

This year's event was sponsored by the Office of the Vice President of Student Affairs for Bowling Green State University and the Great Lakes Chess Association. Over 100 trophies were presented to individual and team winners along with scholarships totaling \$1000 to the individual winner of each section. Special guests included Dr. Rodney Rogers, Dean of the College of Business Administration at Bowling Green State University, who served as Master of Ceremonies for the tournament and the guest speaker was Captain Cameron Jackson, Assistant Professor of Aerospace Studies of Bowling Green State University.

The Montessori School of Bowling Green won the 2009 Ohio Chess Team Championship (K-6) with the team of Ben Schetter, Nick Van Vorhis, Robert Hoffman, Anthony Shepherd and Spencer Rogers. The Bowling Green group outscored 2nd Place Woodbury Elementary School of Shaker Heights by just 1.5 points while Canton Country Day came in 3rd Place with 6.0 points. Schetter, Van Vorhis and Hoffman finished 13th, 14th and 16th respectively each recording 3 wins out of 5 rounds.

The Montessori School of BG also finished in 2nd Place with 10 points in the U-750 Section. Winning 1st Place among the individual players in the U-750 was Montessori student Isaac Rogers who won 4 out of 5 games. David Myerholtz placed 12th with 3 points. Also scoring for the Montessori U-750 team were Elana Cable, Jared Bechstein and Amanda Hoffman.

A number of Montessori players also competed in the Grade 4-6 Novice Section and in the K-3 Novice Section. They were Aubrey Bartman, Annie Miner, Lily Krueger, Claire Wells-Jensen, Daniella Fedak-Lengel, Cate Longmore-Micham, Megan Harvey, Sage Albert, Gabrielle Coon and Alec Fedak-Lengel.

The Montessori School of BG had 20 players compete at the event.

Official results can be found at [www.chessrocks.org](http://www.chessrocks.org).

### Calendar of Events

Conferences	March 19 & 24, 2009
Late afternoon, evening	
Rummage Sale	March 21, 2009
Sponsored by Chess Club	
School OPEN HOUSE	March 22, 2009
Everyone is invited to see the many opportunities available to their child	
Enrollment Forms Due	March 23, 2009
German Club	March 23, 2009
McDonald's Fundraiser	March 25, 2009
Sponsored by Chess Club	



### Calendar of Events

No School	March 27, 2009
Conferences	
GL Scrip Orders Due	March 30, 2009
Chess Supernationals	April 3-5, 2009
In Nashville, Tennessee	
Spring Break	April 6-13, 2009
No School	
German Club	April 20, 2009
GL Scrip Orders Due	April 20, 2009
(Last one for the school year)	
German Club	May 4 & 18, 2009

## GL SCRIP - YEAR-END SCHEDULE

**Monday, March 16**

**Monday, March 30**

**Monday, April 20**

**Order forms and payment are due in the office by 9am of the order day to be processed.**

**Please make checks payable to MSBG.**

**GL Scrip is closed (and so are we) the week of 4/6.**

Monday, April 20th is the final order for this school year!  
Remember, Mother's Day, Graduation, end of year gifts are just around the corner!

**I am looking to "pass the torch" as Volunteer Scrip Coordinator, at the end of this school year. If you are interested, please contact me or Natalie.**

**Thanks, Shareen Avery [jsaveryfarm@aol.com](mailto:jsaveryfarm@aol.com)**

GLScrip, My newfound friend...

I admit, sometimes things go right over my head. Sometimes I have to hear things more than once to grasp their importance. I consider myself to be a shop savy person. I handle the money in my house (because my husband has holes in his pockets) and I have a budget that for the most part is followed to the letter.



I DIDN'T KNOW THAT THE MONEY SAVED BY USING GLSCRIPT CAME RIGHT OFF MY GRANDCHILDREN'S TUITION! I apologize to the PTO for being nonchalant about using it when I thought the money went to them. But to think that I was letting good money go unused by buying gift cards for gas, going out to eat, getting coffee in the morning, buying video games, renting movies...somebody smack me (gently please)!

My husband and I are currently looking for a new DVD player (the hole in my husband's pocket keeps shouting "blue ray, blue ray"), we'll see. By using a gift card at Radio Shack approximately \$10.00 will be deducted from tuition. How can I pass that up?!

All you need is a computer savy person and a love of saving money. Get your family members involved and you could cut your child's tuition in half. One mom from our school has already done it! If you are concerned about tuition rates, this is a good way to help out.

## Early Childhood - Geometry

Geometry in the Early Childhood Classroom is more than learning a square, circle, or triangle. Maria Montessori observed that children learn by taking in information through their senses and movement. Therefore our geometry works are concrete like the pink tower which introduces the child to a cube. The child carries the pink tower piece by piece, starting with the largest and moving down to the smallest, until all 10 cubes are on the rug. This allows the child to notice how the weight and size of each cube gradually decreases.

In the geometric solids basket your child is introduced to the cone, cube, cylinder, prism, pyramid, ellipsoid and ovoid. From the three dimensional experience (of the brown stair, red rods, geometric solids, pink tower) the child moves to the two dimensional experience using the geometric cabinet of plane shapes including the triangle, rectangle, hexagon boxes and our metal insets.

Put your child  
In private school  
**without putting your family in financial difficulty.**

Apply today and your child, grade K-8, could receive  
a scholarship worth up to \$1250.00 at the  
Montessori School of Bowling Green.

Northwest Ohio  
Scholarship Fund

To apply go to [www.nosf.org](http://www.nosf.org) TODAY!

## Lower Elementary

The study of geometry is an important part of the lower elementary curriculum. We give a geometry lesson each week and ask the children to do a follow up activity. The lessons are often done in small groups so that students can take an active part.

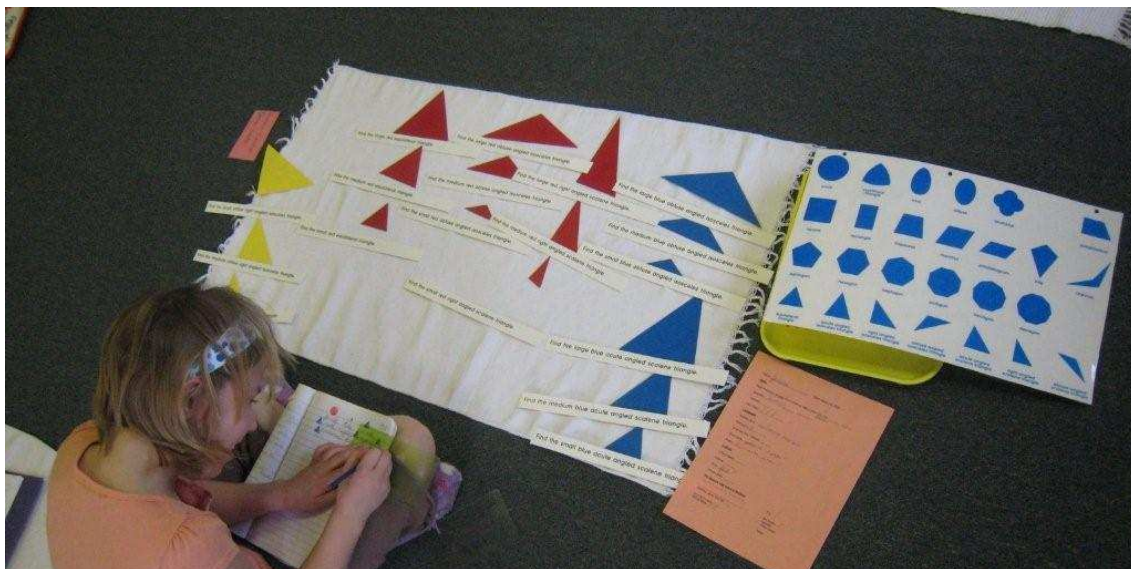
There are several materials used during geometry lessons. We use the geometry cabinet that is made up of five drawers: triangles, rectangles, regular polygons, circles and quadrilaterals. We use the geometry sticks and tack board to build geometric shapes. The geometric solids are the three dimensional solid wood figures that are painted a light blue. These ten figures represent a tactile way to see the shapes. The constructive triangles come in three different boxes: blue triangles, blue scalene triangles and rectangle box. The Montessori protractor is used measure angles. It is marked with 360 degrees. We also use nomenclature cards for learning concepts and vocabulary.

The topics studied in lower elementary geometry are varied. These topics include: points, lines, planes and solids; angles; introduction to closed figures; circles and other closed figures; triangles; quadrilaterals; polygons with five or more sides and geometric solids.

Room 203 is please to welcome student teacher Miss Sarah Porter to the classroom. Miss Sarah will be with us until the end of April. There are three new units on the classroom shelves. Fractions were added to the math shelf. Our students trace fraction shapes and learn the fraction names. They are working toward adding, subtracting and reducing fractions.

Our zoology shelf now has the bird work. Students enjoy learning about different kinds of birds, their nests, and body parts.

The third year students have been working on poetry during their writing time. First and second year students have also been having special poetry lessons.



A student works on a geometry lesson. The green template she is holding has all the geometry symbols in miniature so she can draw the one she needs and then work the problem.

## Upper Elementary

Dear Parents,

Last Friday the upper elementary students celebrated a very special geometrical day. It was  $\pi$  day! March 14<sup>th</sup> (3.14) was actually on Saturday but the students celebrated on Friday with special lessons, a story, and of course, some pie!

To engage the students in the lesson, Miss Megan put out several different sized lids and some string. Students were instructed to measure the circumference of the lid with their string. They cut the string and measured the length with a ruler. They then explored how many diameters fit on the length of the string. The students discovered that there were three diameters with a "little bit" left over. The "little bit" that was left over was  $\frac{1}{7}$  of an inch, which is the decimal equivalent of .14. Students were able to learn, through discovery, the formula for  $\pi$ . This is an example of how Montessori uses concrete materials to teach abstract concepts. We also use concrete materials for the study of area, volume, and equivalency. Many of the materials revisit preschool materials. For example, did you know that the volume box is the thickest piece of the brown stair?

Last Wednesday the students spent the morning at The Toledo Museum of Art where they were able to look at many artifacts of the ancient river civilizations. Our students were extremely well-informed about the art and moved excitedly from one display to another. Our Docents were impressed by their knowledge and complimented them at the end of the tour. One of the docents asked the students if they knew how much it cost to get into the museum. Their responses ranged from \$5.00-\$1000.00. Do you know the price of admission? IT'S FREE!

Deb and Megan



"Pi" goes on into infinity but our classroom figured out and displayed the first 25 digits. See the next page for the remaining numbers.





The next numbers in the series of 25.

The upper elementary students finalized their studies on Ancient Egypt by taking a trip to the Toledo Art Museum. Unfortunately, the mummies are no longer on display because they are deteriorating so rapidly.



Enrollment forms have been sent home and are due back  
Monday, March 23, 2009.  
Please fill out the forms in their entirety.  
If the answer is “not applicable”, you may write N/A but according to  
licensing we must have each question answered.  
We thank you for carefully filling out your paperwork.