

# Montessori Pathways'

## News

*December, 2012*

Notes from Ms. Alena



*"The Snowflake"- Winter Camp project*



The children were only in school for two weeks in December. But they were extremely busy in this short amount of time. Aside from working with materials, their main task was preparing for the **Winter Celebration**. There was not a lot of time in which to prepare after the Thanksgiving Celebration. The children had to prepare songs, dances, masks, stage decoration, family presents, and the Kindergarten and Elementary students also prepared their play. The

children continually sang songs throughout the day, living in the spirit of the celebration, and were very excited to share it with you. We hope you enjoyed it!

I was very pleasantly surprised when one of the Kindergarteners approached me the day after the celebration and asked when our next rehearsal is! It makes sense since the rehearsals not only allowed the children to uncover their skills but also feel the reward of presenting their hard work. Thank you to everybody who shared this wonderful evening with us.

We hope everybody had a wonderful holiday season and we wish you the best of luck in the coming New Year.



### Coming School Events

January is an important time for parents in making the decision regarding their child's Kindergarten and Elementary attendance. Prior to making this decision, it is important to consider all of the possible options, which is why we invite you to attend our **Parent Evening "Thinking about the future - Montessori Kindergarten year and Elementary education"** on **Thursday, January 23, at 6:30 p.m.**

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We really encourage you to attend this meeting and prepare any questions that you may have.

As always, if you have any comments, questions, or concerns, feel free to contact us via e-mail  
*montpathways@hotmail.com*

*Warmly,*

*Ms. Alena*

## **Working with Montessori Materials**

### **Addition Bingo**

Montessori Bingo games are traditionally elementary level works and have absolutely no relationship to the Bingo games you may be familiar with. These Bingo games are really activities for the children to practice math skills and then self-check their results. These activities provide a way for older children to take charge of noticing if answers “seem” right or wrong and then use the tools in the classroom to determine the correct answer.



Several years ago, I was shown a version of Addition Bingo by a 6-9 Elementary teacher. While the activity was a little too advanced for my Kindergartners I decided to change it to create a simplified version that would begin to build the same skills with the materials the children were already using in other ways. The Addition Bingo I now teach the Kindergartners is an advanced work that follows after a lot of practice using The Addition Strip Board and Dice Addition. It is an activity that they practice the second half of Kindergarten along with addition facts practice using colored bead bars.

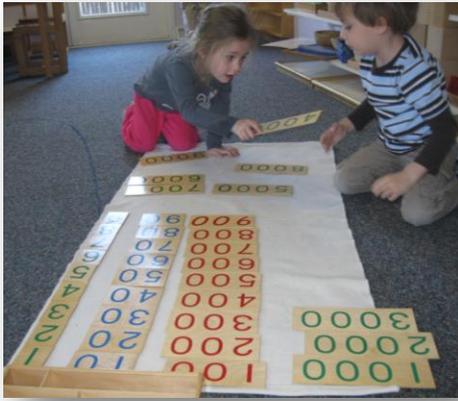
Addition Bingo begins with the child choosing 10 random equation slips and placing them face down on the table. Equation slips each have one addition equation on it such as  $9+6=$  . Then one at a time the child flips over one equation slip, reads the equation, then uses the addition control chart finds the correct answer. The Addition Control Chart is a horizontal and vertical grid that lists every addition fact  $1+$  thru  $9+$  in a systematic and organized way. The child is required to find the correct column based upon the first number in the equation and then find the correct row based upon the second number in the equation. The child then records the equation with the correct answer and flips over the next equation.

The skill of reading a grid chart and checking your own answer make Addition Bingo a meaningful way to practice addition math facts without memorization.

*Ms. Jocelyn*

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## The Forty Five Layout.



One particular work in math is the 45 Layout. It entails an elaborate set up as well as mastery of building concrete numbers using unit cubes, ten bars, hundred squares and thousand cubes. It is based on the decimal system with an introduction to place value and organization of the materials.

It is a "big" work that needs lots of space (usually 2 rugs) and draws lots of attention from the younger children because the layout takes a long time and the presentation is elaborate.

The child or small "team" starts with by laying the wooden numerals 1 - 9 on the right side of the rug. Next, they associate the proper quantity of unit cubes by placing them next to the wooden cards with that number. Next the wooden numerals 10 - 90 are laid to the left of the ones and the proper number of ten bars is placed corresponding to their number. The hundred squares 100 - 900 are each given their correct corresponding squares to the left of the tens. Lastly, to the left of the hundred squares, the thousand cubes are placed with their numerals and their matching cubes.



This process takes quite some time in organizing the numerals and trips to gather the proper quantities to associate with them. One of the most beautiful aspects of this hands-on work is that it is sensorial as well. A one cube is exactly one tenth of a ten bar; a ten bar is exactly one tenth of a hundred square which is one tenth of a thousand cube. The materials were proportionately designed and each is weighted accordingly. This truly creates a concrete hands-on concept that the child can see and feel.



Next, we introduce building numbers using these concrete materials. For instance, if asked to build the number 5,237, we place the wooden numerals 5,000, 200, 30 and 7 on their rug. The child then retrieves the proper quantity of thousands, hundreds, tens and ones and lays them out under the wooden numeral. We then slide the wooden numerals together to read the correct number 5,237!

Once this skill is mastered, we make two numbers and ask the child to add them together to solve an addition equation. This is such a great way to introduce math concepts into a concrete fact!

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If you would like a presentation of this or any other material you have heard about at home or are curious about, just ask. We always have several volunteers who are happy to share their knowledge.

*Ms. Christine*

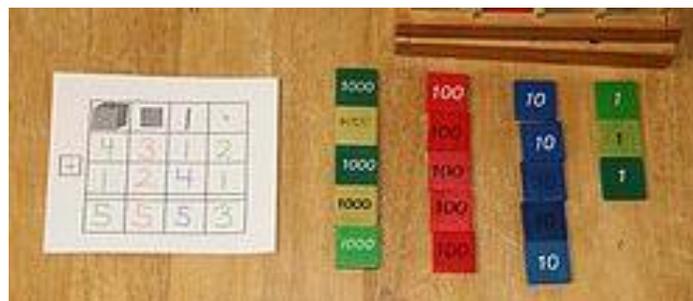
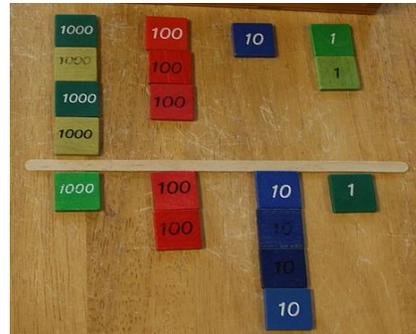
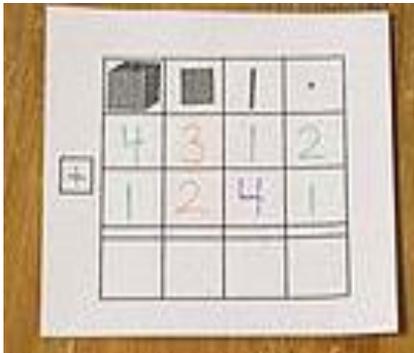
### The Stamp Game.

The Stamp Game material is similar to the Golden Bead material, however it is moving in the direction of abstraction. The Golden Bead material, used with all four operations, serves the purpose of teaching quantity in a very concrete way. Students are also learning number symbolizing during this time. For example, students see the actual cube that represents one unit and can symbolize this quantity with the number 1. They also can visually see what happens when 1000 unit cubes are put together. They form the 1000 cube which is represented by the number 1000. The Stamp Game material is presented to a child once they have worked with and mastered golden bead materials for a specific mathematical operation.

In Elementary, we begin with the operation of addition. Once both static addition (no exchanging or carrying) and dynamic addition (problems that have at least one exchange or carry) are mastered using the Golden Bead Materials, students are introduced to Stamp Game Addition. The real quantity is no longer used. Now students are simply using the symbol for the quantity which is printed on the tile.

For example, a problem such as  $4312 + 1241$  would be solved the following way:

1. Lay out two green tiles with a number one printed on each
2. To the left of the units, lay out one blue tile with a 10 printed on it
3. To the left of the tens place, lay out three red tiles that have a 100 printed on each
4. To the left of the hundreds place, lay out four green tiles that has a 1000 printed on each
5. Below the first number, you start again by placing your units, tens, hundreds and thousands for your second addend
6. Now you are ready to add them together!



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Because the children have worked with the golden bead material, they understand the process of adding the numbers together and know when they reach ten in any place, they can exchange. For example, using the problem above, a student would know when they combine four hundreds with seven hundreds, they will count out ten hundreds and exchange them for one thousand tile.

As mentioned above, the stamp game is used for all mathematical operations in a similar way to how the golden bead material is used. The primary purpose of this material is to move children from the concrete to the abstract. Many begin to notice when to exchange and why while using this material. This will eventually lead to using materials such as the small and large bead frames and to working without materials (complete abstraction). The process allows students to have a solid mathematical foundation and understand the why and not just the how to solve problems.

*Ms. Katy*

## Notes from the Elementary Class (North room)

*Ms. Katy*

Happy New Year! I can't believe we are almost half way through the school year. I would like to again thank all the parents for coming to the **winter celebration** this month. The Kindergarten and Elementary classes did such a great job preparing for the play and it was very nice to watch them perform for their families.



This month we also completed our four **skating lessons** at the Crystal Ice House. The instructors were wonderful and the children conquered some skating fears. Most went from learning how to balance on the ice the first week to skating backwards, around objects and how to jump and land on both feet by the last lesson. Going as a class provided some students with the extra nudge they sometimes need to try something new and it also gave them an opportunity to act as a small community outside of the classroom.

We also took a **field trip** in December to the **Crystal Lake Food Pantry** with the Kindergarten class. Each child was responsible for bringing 5 - 10 items of food to be donated. The classes had wonderful questions and it was a great service opportunity.

Another highlight from this month is that the Elementary class completed the last four of the Five Great Lessons. The second great lesson was **The Timeline of Life**. I forewarned the students that this lesson would not have any confetti or oozing volcanoes like the first great lesson did.



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It's instead told using a timeline that shows how life evolved over billions of years. As with any of the great lessons, the primary purpose is to leave an impression and spark an interest in the child. This lesson lead into researching topics chosen by the students such as ferns (which have been around 325 million years!), what were the first sharks like, and, of course, dinosaurs.

The third great lesson is the **Coming of Humans** which focuses on the human ability to love, communicate and invent.

The last two great lessons given were **Communication in Signs** and **the Story of Numbers**. As you know, the students will hear all the great lessons again during their second and third year in the three year Montessori cycle. As first year students, the goal is not for them to memorize dates and animal and plant classifications. Instead, it is to simply leave an impression of the amazing world we live in and how much there is to know! Each subsequent year, their research will evolve and shift into having a more refined topic and more specific detail.



In the different areas of work this month, the children received new presentations at the beginning of the month. The last two weeks of December, before winter break, were spent allowing the children to catch up in their work plans and allowing for choice.



Once caught up in their work plan, students were able to choose from any work they had previously been given a presentation. It gave me a chance to see what areas they are naturally drawn to. Choices made this month by the children included Bingo Addition, map making, United States research, art, and dinosaur research to name a few.

The New Year brings about new activities and procedures in the classroom. In January, the students will begin learning cursive writing and will now be allowed more choice in their work plans.

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For every presentation and follow up work they are given, they will be responsible for choosing one work on their own.

Choosing their own work involves making a good choice, remembering the procedure for completing that particular work, and recording their work. This will be a great opportunity to practice responsibility and time management.

***On January 7th, I will have a sign up sheet available for midyear Elementary conferences. The conferences will be held during the week of January 14th.***

I hope everyone has a wonderful January and a great start to the New Year!



*Thank you*

*Ms. Katy*

## **Kindergarten Extended Day News**

***Ms. Jocelyn***

The focus in Kindergarten in December was *“how can we help others in our community”*. As a group we read several books about ways children can help others and discussed why we need to help others. We joined with the Elementary class and discussed some of the reasons and situations in which others may need our help. Together we discussed the fact that sometimes our neighbors or other people who live near us do not have enough money to buy food for their families and that we can help them by donating items to the local food pantry.

The children were all very interested in this notion and had many questions such as “why don’t they just go to the bank and get more money” and “why don’t they just go get a job”. We discussed the fact many people who need to use the food pantry are in fact people with jobs, but their jobs may not pay enough to pay all their bills and that despite their best efforts not all people have extra money saved in the bank. We also read several books about the idea of a “circle of giving”; when one person helps another, that person is then inspired to help someone else and so on. One book we read was called “Ordinary Mary’s Extraordinary Deed” which explored the idea that one simple act of kindness can create a chain reaction to create 6 billion good deeds around the world.

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The culmination of these discussions was a meaningful *field trip* to the **Crystal Lake Food Pantry** in order for the children to see a real food pantry and select and bring their own donations to donate when we visited. Each child was asked to select 5-10 non-perishable items from the Crystal Lake Food Pantry's most needed items list, bring it to school and then share with the group which items they choose. This activity had several purposes. First, the children learned which kinds of items are needed at a food pantry, also they needed to read the list at the store and make appropriate choices with their parents. Finally, they needed to choose items that could fit in one bag that they could carry by themselves on the field trip. Many of the children reported that they decided that if they choose all canned foods it was too heavy to carry so they picked toothpaste, jell-o, rice or pasta instead...real-life problem solving!



Ms. Katy and I were so pleased at the generosity you and your children showed and are happy to announce that our group donated 137 pounds of food to the Crystal Lake Food Pantry on our visit!



Also in December the Kindergartners finished up their **animal observations of a bird and fish**. They learned the vocabulary for the parts of the bird, made bird books, painted and labeled a bird diagram, and had a live bird visitor to complete a bird observation log. ‘

The children had the opportunity to observe Pangaea, the parakeet and made some great observations such as “*She uses her beak to scratch her feathers*” and “*Her feet wrap around the swing*”. For our fish observation, we used our large hallway aquarium. It was fun for the children to really take time to watch the fish that are a part of their everyday environment, but that often get overlooked. Some interesting observations included “*I can see the gills moving*” and “*The dorsal fin is a different shape on these two fish*”.

In Language the Kindergartners are all progressing with their **Reading, Sight Words, Reading Comprehension and this month Syllable Clapping**. The syllable clapping work requires the child to read the picture/word card aloud and clap out the number of syllable and then sort the words by 1, 2, 3 or 4 syllables. This work creates awareness in proper word pronunciation and helps increase reading fluency.

In Math, the children are continuing to practice addition skills with more advanced versions of works they are already familiar with.



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The children are practicing **4-digit addition equations** by playing *the Banker's Game* by exploring the idea that sometimes you have a zero place holder ( for example: the number 4560 has no ones or 4509 has no tens). The children are also practicing using the *Addition Working Charts* to increase their speed and understanding of solving addition math facts by playing *Addition Bingo* (you can read the full explanation in this newsletter)



*Ms. Jocelyn*

## Notes from the South Classroom

*Ms. Jocelyn, Ms. Ambreen*



As usual, December began with a flurry of classroom activities centered around our preparation for our all-school **Winter Celebration**. The children were very busy practicing songs and poems, making winter themed artwork and preparing holiday gifts for their families. For our special December morning in the South Room we had two fun stations for the children to visit. Station 1 was packing cookie goodie bags for the Winter Celebration and Station 2 was completing their Reindeer Poem Gift Cards.

The children were all very excited to have a special surprise gift to take home and give to you as you celebrated the holidays. We hope you enjoyed them!

We would like to extend a thank you to all the families who provided cookies and treats for the goodie bags and an extra special thank you to *Sydney's Mom, Tammy* and *Elizabeth's Mom, Song* for assisting us on our special morning. We truly appreciate your generosity of time and talents that you share with us and the children.



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As December is a generally a high-excitement time of year, in the classroom we try to keep our routine as peaceful and grounded as possible. As the children experience a flurry of holiday decorations, songs and sugary treats we try to balance that with healthy snacks, familiar activities and much-loved songs and books at school. As a result this month we focus on **extensions of work activities** with many of the children.



Advanced *cutting, gluing and writing projects, story writing and book making activities* are generally presented as it builds upon many of the skills the children have been practicing all year and provides a meaningful way to extend a project over several hours or days. Some children really enjoy finishing the project in one day, while others work for awhile, take a break and then come back and work on it some more later that day or the next.

*One of the beauties of the Montessori Method is that we have the flexibility to allow and encourage every child to work in the way that best fits them.*

Finally, we would like to thank you for all of the wonderful cards and gifts you and your children presented to us this month! It was wonderful to see the joy in your child's eyes as he/she presented gifts with beautiful **grace and courtesy**. The very basic exchange of "thank you" and "you're welcome" comes so naturally for the children now that we build upon those courtesies by modeling statements such as "thank you for thinking of me and thank you for being so generous". Year after year one of the most often noted changes to children who attend Montessori is their ability to be genuinely polite and courteous to both adults and other children. We hope that you witnessed those same skills as you celebrated the holidays with family and friends.



*Warmly,*

*Ms. Jocelyn and Ms. Ambreen*

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## Notes from the East classroom:

*Ms. Christine, Ms. Ellen*



Happy New Year to all! Our class spent the last weeks of school before the winter break in preparation for our **Winter Celebration** and making gifts for our families. We hope you enjoyed the heartfelt love, pride and effort in each individual's endeavor! As a parent and teacher, it is so endearing to watch their continued growth and compassion on a daily basis.

Although many *enrichment activities* were introduced in art and practical life, there has also been tremendous work in language, math and science. We revisited the **metal insets and geometric solids** with extensions and renewed

interest. **Maps** came home; **garden flower identification**, **addition equations** and **silent letter booklets** were introduced and repeated as our students gained the knowledge and comfort of repetition and success in staying on task!

The morning work cycle is an amazing event to behold; at one point, after arrivals, many children seem to "unwind" in the art and practical life area. When they have completed their chosen project, they are drawn to sensorial or math, language, geography or sciences.



*We encourage each child to visit a different area of the classroom and their powerful observation to what the older children are choosing is a wonderful way to move each along at their own pace.*

Lastly, a huge thank you to our families for your generous time, Sharing Basket donations and holiday gifts. Our school family is so lucky to have such great support.

Hope your all had a Merry Christmas and all of the best in the New Year!



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*Sincerely,  
Ms. Christine and Ms. Ellen*

### Notes from the afternoon classroom:

#### *Ms. Terri*



During the first couple of weeks in December, there was a whirl of activity to finish the Christmas projects in both the kindergarten and 1<sup>st</sup> year classes. Our clay pieces were allowed to air dry before being fired in the kiln at Ms. Terri's. Then both classes drew patterns or designs on either their **coil pots** or a on their **ceramic tiles**. The paints or glazes we used were blue, green, red, yellow and white. The children applied three coats of glaze with small brushes. This proved to be a little tricky because the glazes are thicker than the paints they are used to. Next,

the pieces were clear glazed (sealed and food safe) by Ms. Terri before being returned to the kiln for the final firing. The final result – treasured keepsakes for years to come!

All of the children in the afternoon group were involved in making the **scenery for the Gingerbread play**. We drew and painted the props: the oven, the three-sided cardboard trees and the banner as well as some of the masks for the play. Lots of drawing, coloring, painting and cutting were involved. Cooperation and teamwork were also involved.



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One afternoon, as the children were lying on the floor coloring the river banner for the play, one by one they started singing Christmas carols and songs from the play. It was beautiful to see 3 year olds thru 1<sup>st</sup> year students working side by side on the same project totally enjoying each other's company as well as what they were doing.

The children also enjoyed making a variety of **gingerbread men cut outs** to decorate the play banner. They traced, cut out and colored the gingerbread men from brown construction paper before adding eyes, noses, mouths, buttons and frosting. That was the original model but the creativity of many children took over however and some of the gingerbread men receive eye patches, Dracula teeth, superhero capes, jewelry, bows, hats, etc. Hopefully, all the little men made it

home in time to help decorate your home.

Another fun project this month was the Christmas stockings done by many of the children. The children drew and cut out two stocking shapes before coloring and decorating with designs and patterns in crayon. We punched holes all along edges and then laced the stockings with colorful yarns. Several of the children made paper toys to put into their stocking such as cars, dolls, footballs, soccer balls, teddy bears, dogs and candy canes. Their finished **stockings** were displayed in the hallway along with many of the gingerbread men.



For our **baking project** this month we used an *Old Fashioned Sugar Cookie recipe*. During the last few afternoons before winter break we made cookies from the dough we had prepared earlier. The children rolled out the dough on a floured surface then cut out their cookies using a cookie cutter tree, snowflake, snowman, stocking shapes. The children were very careful to wash their hands, wear aprons and only handled the dough for their own cookies. We made butter frosting with powdered sugar, butter and milk. After frosting their cookies, the children decorated them with a variety of Christmas sprinkles and sugars.



You can use this recipe for any occasion with any cookie cutter and even prepare the dough ahead of time. The children absolutely love baking. The smell of vanilla, the feel of the dough, the colorful frosting and sprinkles, the cookies baking - a truly seasonal delight to the children!

Happy New Year!

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Here's the sugar cookie recipe – Enjoy!

### *Old Fashioned Sugar Cookies*

#### Ingredients:

3 cups all purpose flour	1/8 teaspoon salt	1 ½ cups sugar
1 teaspoon baking powder	1 cup margarine or butter	1 teaspoon vanilla
1 teaspoon baking soda	2 eggs	½ teaspoon lemon extract

#### Directions:

- In large bowl, combine flour, baking powder, baking soda and salt; mix well. Using fork or pastry blender, cut in 1 cup margarine until mixture is crumbly. In small bowl, beat eggs. Gradually add sugar, 1 teaspoon vanilla and lemon extract, beating until light. Add to flour mixture in large bowl. Stir by hand until dough forms. (If necessary, knead dough with hands to mix in dry ingredients.) Cover with plastic wrap; refrigerate 1 hour for easier handling.
- Heat oven to 375°F. On lightly floured surface, roll out 1/3 of dough at a time to 1/8-inch thickness. (Keep remaining dough refrigerated.) Cut with 2 1/2 to 3-inch floured cookie cutters. Place 1 inch apart on ungreased cookie sheets. If desired, decorate with decorator sugar or multicolored candy sprinkles.
- Bake at 375°F for 6 to 11 minutes or until edges are light golden brown. Immediately remove from cookie sheets. Cool 15 minutes or until completely cooled.

*Warmly,  
Ms. Terri*

