# **May News from Elementary Class**

## It's a Wrap

Is it just me or has the time flown by?? Here it is the end of the school year. The weeks have gone so fast!

I want to begin by thanking all of the parents for their warm welcome when I began a few weeks ago. I really appreciated it.

I just wanted to highlight a few ideas and events since the last newsletter.



### Multiple ways to solve a problem:



One of the joys of teaching, as any teacher will attest, is seeing critical thinking and problem solving evolve.

Sometimes, it is a very practical situation that calls out for those problem skills to be utilized. Sometimes it is a theoretical problem. I would like to share one "behind the scenes" math lesson which took exactly that direction.

Last week we were discussing and

actually showing perimeter of various shapes in preparation for n individual work which called for that information. The lesson involved calculating the perimeter of squares and rectangles.

As a group, we began working out the perimeter of a rectangle which measured  $10 \times 5$ . At first, we began by simply adding the 4 sides: 10 + 5 + 10 + 5 = 30.

However, a discussion evolved about how there were other ways of solving that same problem. Below are listed the several ways that some child saw. I am not sure that even this list exhausted the possibilities that the children could come up with.

You will recognize that laws regarding multiplication were used:

The Associative law:

$$3 + (6 + 7) = (3 + 6) = 7$$

The Commutative law:

$$6 \times 7 = 7 \times 6$$

The Distributive law:

$$6 \times (7 + 1) = 6 \times 7 + 6 \times 1$$

All were used spontaneously and with understanding by the children. We began with

$$5 + 10 + 5 + 10 = x$$

1. 
$$5 + 10 = 15$$
 and  $5 + 10 = 15$ .  $15 + 15 = 30$ 

2 
$$.5 + 5 = 10$$
 and  $10 + 10 = 20$   
 $10 + 20 = 30$ 

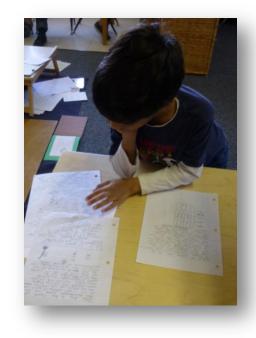
3. 
$$10 + 10 = 20$$
 and  $5 \times 2 = 10$   
 $20 + 10 = 30$ 

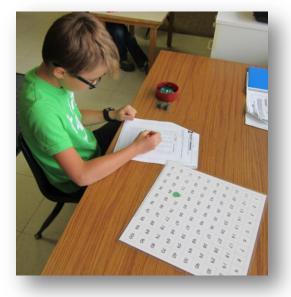
4. 
$$10 \times 2 = 20 \text{ and } 5 \times 2 = 10$$
  
 $10 + 20 = 30$ 

5 someone saw that 
$$10 = 100$$

6. 
$$10 + 5 = 15$$
 and  $10 + 5 = 15$   
 $15 \times 2 = 30$ 

7. That led to someone seeing that 
$$5 + 5 = 10$$
  
Therefore  $10 \times 3 = 30$ 





And so it went for almost ½ hour. What fun! What a great morning!

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#### **Visitors:**

We had some wonderful guest visitors these past few weeks:

**1. Mr. Matt.** What a pleasure to meet and welcome Mr. Matt to Montessori Pathways. He spent the morning with the students, working with several on advanced math presentations.





2. Rita, a former high school science teacher came in and talked about light, refraction, the rainbow, wave length, and bending of light.

The children were spell-bound for an hour. Discussion, and questions, and answers flourished.

**3. Vicky.** She is my daughter-in-law. She grew up in China and came to the United States last August. It was her first time coming to the United States. In China, Vicky was an English language teacher.

We found China on the globe and then on the map of Asia. She shared with us many interesting things about her life growing up.

For example, in her class, there were 60 children and one teacher. This was true of every year beginning with first grad. She also talked about how important it was to study to get into a good school. They went to school from 8 AM to 5 PM and then did 2 hours of homework every night. She also showed us how to sign numerals in Chinese and made a book of Chinese numerals that several children chose to reproduce.



4. Mr. Tom Vos. Tom is a musician. He has studied music all his life, played in



orchestra and is a master of both the violin and the viola. Tom shared with us so much music information: notation, multiple kinds of clefs, the music staff, various musical terms and so much more. He, of course, brought his instruments so we could really see and hear the viola and the violin being played and played in a variety of ways

We were treated to music from

Star Wars, Swan Lake, Mozart, and even fiddle music from Kentucky. It was a wonderful morning and the children's conversation continued long after Mr. Tom left.

#### Science:

The purpose has been to make science demonstrations fun and to fee the students natural curiosity.

- 1. Adding drops of water to jello granules. What does that make? A delicious treat. In only a few seconds.
- 2. Experiments with air and water. Actually how, when air fills a container and is blocked from escaping, the water cannot enter.
- 3. Invisible writing. That was a hit!!!! Many of you have samples in your child's folder.
- 4. Construction of squares and cubes (and other kids went on to create a variety of 3 dimensional shapes) using simply toothpicks and clay.

### What a Way to End!!!!!!

A perfectly cast, delightful story, singing, dancing, music. Simply a night to be remembered.

Thank you Ms. Alena!. It was great...

Have a wonderful summer, Ms. Karen

