

# Mandala News

## January 21, 2013



### The rise and fall of... AIR

As the sun warms the earth, the air above it gains heat. This makes the air expand resulting in the same volume of space having less particles of air. As the lighter, warmer air floats up, cooler, heavier air sinks. A convection current is formed!

As the air rises, it cools. When the water vapor cools enough to condense, a cloud or fog is formed. This condensation temperature is called the “dew point”.

Our Earth Science students have conducted experiments with water and food coloring as well as a “cloud in a bottle” to see how temperature or pressure differences lead to convection currents and dew point.

Such currents are an important engine of weather, ocean currents, and plate tectonics. The interplay of density, temperature, pressure, and volume are very complex and a challenge to understand.



*Margo and Josie during a meeting.*



We welcomed Jason to Mandala School last week. He fits right in.

### Other News

- Emily & April have joined us for a few weeks as they work on a “differentiated learning” project for their St. Bonaventure Masters.
- Melissa Lewis is with us for six Fridays to run workshops on theater, drama, and improv.
- Felicitas led a yoga session at Healing Waters that was well-received by all.
- Ms. Jeannet has started a project on Greek art and figure drawing.

### Bienvenue, Margo!

Margo has come on a daily basis to help us learn French and Spanish. About half of the students are participating and enjoying their work immensely. She has them learning dialogue, playing games, and studying conjugation.

In February Margo will head to Chile to expand her own learning.

## Chemistry Lab

The younger students have worked on activities from Michael Faraday's *The Chemical History of a Candle*.

Lizzy: *The white smoke has wax in it. We can light the white smoke. The black smoke put out the match. The black is caused by carbon.*

*When you put the screen on the fire, you can press down and see the inside of the flame. There is a circle with "nothing" in it. Actually, there is heat and fuel (wax) but there is no air. The air gets burned up before it has a chance to get in there.*



*A flame is a shell. It is hollow.*



*Josie and Lizzy lighting the flame above screening to show that white smoke is flammable.*



*Have I got your attention?*

Branches curve  
Above my head.  
The leaves are falling  
Good and dead  
The trees grown close  
The leaves, a floor  
Leading to  
A forest door.

I open it  
And go astray  
To the meadow  
Where dreamers lay  
I go there  
To rest my head  
And there I sleep  
Good and dead

Julia Haney