

Class Visit, 6<sup>th</sup> grade, Holy Redeemer Middle School, Montrose  
January 13, 2012  
Katie Snell and Luca Malatesta  
Teacher: Beth Cohen

**Katie:** We visited one class in the morning and had an hour and a half window that we could fit our presentation into; we used the whole thing. We spent the first half hour talking generally about plate tectonics and mountain building (at the teacher's request). The students were familiar with most of the plate tectonics concepts I had prepared to talk about and the students were very eager to participate and share answers when I asked them to tell me what different types of plates and plate boundaries were called. We brought a map showing the tectonic plates with us and asked the students to try to identify all of the different plate boundaries on the map. Then we talked about how plate tectonics builds mountains. We ad-libbed additional info on this because they knew so much already about plate tectonics, but talked through different ways mountains form, and got them to think about why continent-continent collision might work differently from ocean-continent collision by getting them to talk about density.

We then gave the students playdoh so that they could see what happens to the surface elevation of a column of playdoh when it is squeezed, and had them make layers out of the playdoh and see what happened to the layers when they were squeezed. We walked around and talked to each pair of students about what happened to the height of the playdoh, and what happened to the layers when they were squeezed. The students seemed to enjoy this a lot and many tried different kinds of layers (thin, thick, etc) to see what would happen.

The playdoh took about 20 minutes, and then I talked for ~10 minutes about my research on paleoelevation, and why it was important for understanding mountain building and we talked about how learning the temperature of carbonate minerals can tell us about paleoelevation. I finished off my presentation by showing them step-by-step what I do to get a temperature out of carbonate rock, and brought props that went with this, including some of my field tools (geologic map, Brunton, hand lens, field bag, fieldbook), large rocks I collected, rocks I'd cut up for sampling, sample billets I've drilled, etc, and showed pictures along the way of field sites, sample collection, rock saws used for cutting and the mass specs I use.

They were surprisingly interested in this and kept asking if I was really the one who'd been to the places in the pictures and collected the samples myself (yes) and if the rocks they were passing around were the same ones in the pictures (yes).

Luca then gave a ~10 minute presentation on his research.

We then told them we'd answer any questions they had and they kept us talking for the last 15 minutes. Overall, it was a great experience; the students were very enthusiastic but also well-behaved. They raised their hands to answer questions,

and paid very good attention. It definitely helped to engage them with a lot of questions and to break up the presentation parts with a hands-on activity about halfway through. Beth was very friendly and clearly has trained her class and taught them well! I wouldn't hesitate to go back.