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Class Visits – 7<sup>th</sup> grade and 8<sup>th</sup> grade  
High Point School

I just spent the morning at High Point School in Pasadena and I had a pleasant meeting with two separate groups of children. I can't remember the grades because I'm still not accustomed to the American school system. But the first group of 15 students were younger and easy to connect to. Most of them were surprised by my appearance. They probably expected an older scientist.

I prepared a talk about earthquakes and plate tectonics. I first introduced different fields of geology, then talked about the distribution of earthquakes in the world. To help the students visualize it, I gathered them around a large world map of seismicity. I asked them some basic geography questions then asked them to identify plate boundaries from the seismicity. This was an opportunity to describe the different plates, the 3/4 types of plate boundaries and the geological history of California.

Then I asked them to figure out if we were standing on the North American plate or the Pacific plate: a vote. Returning to the slide show, I started to talk about single earthquakes and the different types of faults. For this part, I wish I had some rigid/wooden blocks that the student could play with. In particular two blocks to illustrate normal, reverse and thrust faults.

I signed with an explanation of seismic waves and introduced the earthquake machine/seismometer. This was very efficient catching the students' attention. They were willing to use it and test the seismometer. I illustrated the effect of friction and normal stress to the recurrence time of earthquakes by performing several experiments of loading the bricks with various weights on it (I used heavy science books for mass).

I finished the event with examples of damage from earthquakes and asked for further questions. I was asked if we knew how to predict earthquakes. I had plan to show a video of earthquake simulations, but the classroom computer was not equipped with the proper software.

The second group was more difficult to reach, but after a few hands-on activities, their attention was more focused on the talk. The teacher was happy about the events and asked me if the interaction with Caltech could be pursued further. I'm joining a few pictures.

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