



## Modeling Activities in Earth Science

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Students usually find science to be quite abstract. This is especially true of disciplines like Earth Science where it is difficult for the students to conduct and design hands-on experiments in areas such as Plate Tectonics that would allow them to develop predictive models. In the United States the new Next Generation Science Standards explicitly requires students to experience the science disciplines via modeling based activities. This poster presentation will discuss an activity that demonstrates how modeling, plate tectonics and student discourse converge in the earth science classroom. The activities featured on the poster will include using cardboard and shaving cream to demonstrate convergent plate boundaries, a Milky Way candy bar to demonstrate divergent boundaries and silly putty to demonstrate a strike slip boundary. I will discuss how students report back to the group about the findings from the lab and the techniques that can be used to heighten the student discourse. The activities outlined in this poster were originally designed for a middle school Earth Science class by Suzi Shoemaker for a graduate thesis at Arizona State University.