Tectonics Observatory Hosts 60 Sixth-Graders

"If a rock filled up with helium, after millions and millions of years would it float away?" asked Hamilton Elementary School sixth-grader Josh Bascou during a tour of Caltech's Tectonics Observatory (TO) on June 4. Josh and his classmates had just learned how geology graduate student Willy Amidon measures the helium trapped in crystals to tell how long some rocks have been at Earth's surface.

In addition to Amidon's helium research, the 60 students on the TO tour learned about earthquakes and tsunamis in Sumatra, how scientists at Caltech monitor and interpret seismic activity, and how the Himalaya mountains formed. "Mount Everest was under water?!" exclaimed Dillon Sewell, another of the students, after hearing geology postdoc Itai Haviv describe how the mountain grew.

The students got a glimpse of how Earth scientists conduct their research. The visit included a tour of the seismo lab with seismology grad student Carl Tape, an introduction to some TO projects with geology professor Jean-Philippe Avouac, a glimpse into mass spectrometry with Amidon, and some fun, simple rock-and-hammer tests with Haviv. Tours of the TO are part of an effort to increase the level of understanding of Earth sciences in the community. The take-home message, as one student learned: "Rocks tell stories!"

To learn more about the TO and schedule a tour, visit **http://www.tectonics.caltech.edu**.