

## Class of earth science visiting the cradle of geology in Japan

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<http://www.epsu.jp/jmoo2002/>

I planed a fieldwork as a part of a class of Earth Science in our school and carried out on the first Saturday of last October. Our purpose was to visit Nagatoro (Chichibu District of Saitama Prefecture), called "the cradle of geology in Japan" and to promote understanding geological history by observing layers, rocks, and fossils. We visited the Saitama Museum of Natural History and the upper reaches of the Arakawa River.

In the previous lesson, after reviewing the igneous rock and the sedimentary rock, we learned how the metamorphic rock would be formed and discussed the relationship between those rocks. We also conjectured what kinds of rocks would be found out in Nagatoro.

It took about two hours by train from school to Nagatoro. Mr. Takeshi Honma, sub-manager of the museum backed up our study. First, we had a lecture by him, about the geologic features and history of research of Nagatoro, the classification of the rocks, and the point of observation at the river bank. We next enjoyed exhibits in the museum listening to explanation. We felt interest in the geological history of Saitama Prefecture. The special exhibit was also impressive for us.

Then, we observed the metamorphic rock in the river bank of the upper reaches of the Arakawa River. On the surface, we could see the strata caused by pressure in deep underground, so we could feel why this area was called "entrance of the earth". We also could see a fault and a pot hole. Existance of the pot hole showed the past flow of the river.

We gathered various kinds of rocks in a sample bag. We could get all kinds of rocks flowed from more upper areas. We can see almost all kinds of rocks which they are classified in a textbook. Though digging rocks with hammer is prohibited in this area, it is possible to pick rolling rocks. We finally divided them into three kinds and completed the specimen of rocks fixing them to a plate with an adhesive.