## What is required for liquefaction to occur?

\*Moe Sakano<sup>1</sup>, \*Tsubura Miyasaka<sup>1</sup>, \*Misaki Masuzawa<sup>1</sup>, \*Nene Naito<sup>1</sup>

1. Nagano Prefectural Yashiro High School

The factors, which are closely related to cause liquefaction, can be listed as "the environment of sedimentation"," the sizes of the clastics and combination of different sizes", "water level", and "the amount of water pressure". In this study, we performed the following experiments and discuss about the mechanism of liquefaction occurring after earthquakes.

1 We used 6 different sized sands and combinations of them. In the combination study, we also tested about the mass ratio in the mixture of fine sands and coarse sands.

2 In the situation we found in which jetted sand happens the most easily, we tested the effect of water pressure above the sand layers.

3 We also tested the effects of ground water levels.