

## About earthquake resistant building

\*Takuma Ue<sup>1</sup>

### 1. Hongo high school

"Buildings resistant to earthquakes" are the subjects of Japan, which is an earthquake great country. Therefore, we have considered the difference in construction method such as "earthquake resistance", "vibration control" and "base isolation". Both of these methods are excellent construction methods in terms of preventing the building itself from being damaged, but in the case of "base isolation", there is another advantage of "reducing the shaking in the building". The seismic isolation device embedded in the foundation is "absorbing severe earthquake energy" and "to turn it into a gentle rolling and stop the damage such as falling of furniture to the minimum", shake the earthquake compared to earthquake resistance It seems to be suppressed to about one third. Therefore, by experiments, we reproduced models of "earthquake resistance", "vibration control" and "base isolation" and considered "reduction of shake due to base isolation".