

## **Protect Yourself from a Great Earthquake**

### Motivation behind Research Paper

A natural disaster is a dangerous natural phenomenon which can cause damage to human life and disrupt social activities. Among all natural disasters, earthquakes are of particular interest to Japanese people. This is probably because Japan is known as an earthquake prone country. Historically, many earthquakes have occurred in Japan and so Japanese people are familiar with the immense damage it can have on a society. As a result of this catastrophic event, many people have lost their homes and lives. "Leave no one behind." This is one of the many slogans promoted by the Sustainable Development Goals (SDGs). Inspired by this slogan, I wanted to research more deeply about this topic and perhaps discover ways to protect the lives of many people.

### 1. Introduction

The aim is to think about what we high school students can do to spread knowledge about catastrophes such as earthquakes through the use of the internet and questionnaires. A Nankai Trough megathrust earthquake of magnitude 8-9 is said to occur with a probability of 70-80% in the next 30 years. A Nankai Trough earthquake like this is said to cause about 1,700 deaths and about 18,000 injuries in Nara. However, I think that if each person is conscious and takes measures, the damage can be suppressed. Using a questionnaire of Kokusai High School students

and the Internet, I investigated people's awareness of disaster prevention. Based on the results, I thought about the measures that we had to work on.

## 2. Results and Analysis

These results were produced from three questionnaires answered by Kokusai High School students. First, when asked if they prepared emergency goods at home, there were more people who did not than those who did. Second, when asked if they knew the evacuation route of the school, all answered that they did not know. Finally, I asked if there would be anything to worry about in the event of an earthquake at school. There were responses such as not knowing how to evacuate, how to contact parents, and whether they could make decisions calmly. From these results, it was found that few people are taking thorough measures against earthquakes. I thought about countermeasures for earthquakes in various situations. Among them, I will introduce five measures to prepare for an earthquake at home. First, arrange the furniture so it does not fall over during an emergency. Second, stockpile food, beverages, daily necessities, etc. Three days to one week's worth of stockpile is required. Third, prepare an emergency bag. Fourth, check how to confirm the safety of family members. We should always discuss safety confirmation methods and meeting places in advance. Fifth, confirm evacuation sites and evacuation routes. By taking such measures, I think the probability of losing lives in an earthquake will be reduced. Moreover, it is necessary not only to take measures for each person, but also to put disaster prevention goods conspicuously in stores and to conduct disaster prevention education at schools.

### 3. Conclusion and Future Problems

I believe that there are many lives that can be saved by taking sufficient measures. In the Great Hanshin-Awaji Earthquake that occurred on January 17, 1995, many people died because they were trapped under collapsed buildings and furniture. However, in the Great East Japan Earthquake that occurred on March 11, 2011, the damage caused by the collapse of buildings was not severe because the earthquake resistance of houses had progressed. In this way, we cannot completely avoid an earthquake, but we can reduce the damage. We need to make use of the earthquakes that have occurred so far and take countermeasures. No matter how much the government and local governments take measures, we should protect ourselves. Natural disasters come when we least expect them.

### 4. Reflection

Through this research, I once again felt the horror of earthquakes and the importance of countermeasures. We cannot prevent earthquakes from happening, but we can limit the damage. I would like to convey that even after this research is over, each person's measures are important. By doing so, if an earthquake occurs, we will be able to respond without rushing. At the same time, I thought that if the number of people who lost their lives in earthquakes decreased, it would be meaningful to do this research.

### 5. Work Cited

"Preparing for an earthquake that may occur at any time." Nara Prefecture Official Homepage. Web. 18 Mar. 2022.

"Guide to disaster prevention." Prime Minister's Office of Japan. Web. 12 Apr. 2022.