

History of earthquakes assignment



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History of Earthquakes Throughout its prolonged history, the Earth has experienced a myriad of earthquakes that range from minor to major; some of the earthquakes had no fatal impacts while others were extremely catastrophic. However, these earthquakes were undeniably vital in shaping the modern world; without them, some magnificent landscapes that we see today would not exist. In the following paragraphs, we will be discussing the causes and effects of massive earthquakes, and exploring earthquakes that led to the formation of mountains.

The Himalayas The Himalayas, which are currently the world's highest mountain ranges, were created in the Earth's recent history. According to Wikipedia. com, " the formation of the Himalayas is a result of a continental collision along the convergent boundary between the Indo-Australian Plate and the Eurasian plate. " Indeed, the two tectonic plates started to collide at a rate of fifteen centimeters per year about seventy million years ago, during the Upper Cretaceous period.

Twenty million years later, the fast-moving Indo-Australian plate had completely closed the Tethys Ocean, whose existence was known through sedimentary rocks settled on the ocean floors and the volcanoes that fringe its edges. As the Indo-Australian plate continues to make its way towards the Eurasian plate, it is driven horizontally below the Tibetan Plateau, thus, forcing the plateau upwards. As a result of this collision, the Arakan Yoma highlands in Myanmar as well as the Andaman and Nicobar Islands in the Bay of Bengal were formed.

Today, the Indo-Australian plate is still pushing in the Eurasian plate at a rate of 67 millimeters per year, and based on the information of Wikipedia. com, it will travel about 1, 500 kilometers into Asia in the succeeding 10 million years. Since about 20 millimeters per year of the India-Asia convergence is absorbed by thrusting along the Himalaya southern front, the Himalayas are rising by about five millimeters per year. Finally, because of the constant collision of the Indian plate into the Asian Plate, the Himalayas are affected by earthquakes from time to time. " Himalayas. " Wikipedia . 06 06 2008. 7 Jun 2008 .) Destructive Earthquakes In 226 BC, a pernicious earthquake hit Rhodes, Greece. Although the magnitude and deaths are unknown, evidence shows that the Colossus Rhodes and the city of Kameiros were destroyed in this phenomenon. (" List of Earthquakes.. " Wikipedia . 06 06 2008. 7 Jun 2008) The people who resided in the Syrian cities of Ganzah and Aleppo suffered from an extremely devastating earthquake in the year of 1138. This earthquake, known as the Aleppo earthquake, took place on August 9th, 1138. It was about 8. in magnitude, and took the lives of approximately 230, 000 people. This earthquake is listed as the fourth most destructive earthquakes in history on the United States Geological Survey. (" 1138 Aleppo Earthquake. " Wikipedia . 06 06 2008. 7 Jun 2008 .) On July 5th, 1201, the residents of the Eastern Mediterranean were attacked by an earthquake with a magnitude of 9. Because of the 1. 1 million deaths it brought, this earthquake is considered the most destructive one in history. Countries that lie in the wide area between Syria and Upper Egypt were all victims of this horrifying earthquake. " List of Earthquakes.. " Wikipedia . 06 06 2008. 7 Jun 2008) The next terrifying earthquake occurred in Shaanxi, China, on January 23rd 1556. This earthquake, which had a magnitude of 8, <https://assignbuster.com/history-of-earthquakes-assignment/>

is listed as the deadliest earthquake in history on the United States Geological Survey. Approximately 830, 000 citizens of Shaanxi were deprived of their lives during this event. More than 97 counties of China were affected by this earthquake. A 520 mile wide area was destroyed and in some counties, more than 60% of the population did not survive the earthquake. (" List of Earthquakes.. Wikipedia . 06 06 2008. 7 Jun 2008) The most well known and destructive earthquake in the United States is perhaps the San Francisco earthquake. This major earthquake struck San Francisco at 5: 12 AM on Wednesday, April 18, 1906, causing the entire town to collapse within minutes. The magnitude of the earthquake was 7. 8, although some sources state that the magnitude was as high as 8. 3. The San Francisco earthquake also led to an enormous fire near the region. Added with the deaths caused by the earthquake, more than 3, 000 people lost their lives during this phenomenon.

In conclusion, the San Francisco earthquake was the worst natural hazard that the state of California had experienced, and perhaps one of the worst non-manual destruction that the United States had suffered from. (" 1906 San Francisco earthquake. " Wikipedia . 6 6 2008. 7 Jun 2008 .) The Tangshan Earthquake, which is recorded as the second deadliest earthquake in history, took place in Tangshan, China, on July 27th, 1976. The death toll of the Great Tangshan Earthquake makes it the largest earthquake in the 20th century.

Even though Chinese officials claim that only 255, 000 people perished in the Tangshan Earthquake, the estimated death toll was as high as 655, 000. The results of the earthquake were devastating, and it took several years for the

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Chinese government to restore the area. Since the earthquake took place in the midst of a serious of political turmoil within the Communist Party, it shook the Chinese both literally and figuratively, which is why the Chinese later labeled the year 1976 as a " Year of Curse. " (" List of Earthquakes.. " Wikipedia . 6 06 2008. 7 Jun 2008) The greatest earthquake that struck Taiwan took place on September 21, 1999. It is known as the Chi-Chi Earthquake, or the 921 Earthquake. The magnitude was 7. 3, and the epicenter was 9. 2 kilometers southwest of the Sun Moon Lake. The impact that the 921 Earthquake had on Taiwan was horrifying; more than 2, 416 people were annihilated and 11, 441 injured through this event. The cost of damage exceeded 300 billion NT (U. S. 9. 2 billion), and it is taking years for the Taiwanese government to rebuild the area.

In the end, the 921 Earthquake was perhaps the worst natural hazard that the Taiwanese had suffered from. (" 1999 Chichi earthquake. " Wikipedia . 6 6 2008. 7 Jun 2008 .) Sometimes earthquakes not only bring numerous aftershocks, but also tsunamis. An example of this is the 2004 Indian Ocean Earthquake. The earthquake was an undersea earthquake that took place at 00: 58: 53 UTC on December 26, 2004, with an epicenter off the west coast of Sumatra, Indonesia. The Indian Ocean earthquake is the second largest earthquake ever recorded on seismograph.

While people were grieving over loses, another wave of tragedy once again struck the region. According to Wikipedia. com, the Indian Ocean Earthquake triggered several severe tsunamis along the coasts of countries bordering the Indian Ocean. The results of the earthquake and the tsunamis were terrifying; more than 225, 000 people in eleven countries were killed during

this event. In addition, the Indian Ocean earthquake not only brought economical damages to the countries, but also upset the ecosystems of the area. Experts say that the environmental impacts of the earthquake will affect the region for many years.

Therefore, the Indian Ocean Earthquake is considered one of the deadliest earthquakes that Thailand, Indonesia, India, and Sri Lanka have experienced.

(“ 2004 Indian Ocean earthquake. ” Wikipedia . 6 6 2008. 7 Jun 2008 .)

Finally, the most recent, yet equally devastating, earthquake took place about one month ago in Sichuan, China. The Sichuan Earthquake occurred at 14: 28: 01 CST on May 12th, 2008 as a result of motion on a northeast striking reverse fault or thrust fault on the northwestern margin of the Sichuan Basin, and had a magnitude between 8 and 8. 3. As stated on Wikipedia. om, “ The epicenter was 80?? kilometers (50?? mi) west-northwest of Chengdu, the capital of Sichuan, with a depth of 19?? kilometers (12?? mi). ” However, the intensity of the earthquake was so high that it was felt in Beijing (which is 1, 500 km away), Shanghai (which is 1, 700 km away), and several nearby countries. According to Wikipedia. com, as of June 6th, 12: 00 CST, 69, 130 are confirmed dead, including 68, 620 in Sichuan province, and 374, 031 injured, with 17, 824 listed as missing. The Sichuan Earthquake rendered 4. 8 million people homeless, though the number could be as high as 11 million.

The earthquake is considered the most destructive earthquake that hit China since the Tangshan earthquake in 1976. There have been 105 major aftershocks, and more than 7, 000 minor aftershocks. The extent of tremors is surprising: as many as twelve countries felt the Sichuan Earthquake. The

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countries include China, Hong Kong, Macau, Vietnam, Thailand, Taiwan, Mongolia, Bangladesh, Nepal, India, Pakistan, and Russia. In reference to Wikipedia. com, it took eight minutes for the quake to reach Taiwan, and fortunately, no damages or injuries were reported.

Since the Sichuan province is used heavily for nuclear developments, several media have reported about nuclear leaks. However, the Chinese government stated that the thirty-two sources were have been buried, and were retrieved and disposed. People all over the world have been expressing their concerns for the victims of the Sichuan Earthquake. Fundraisers from all over the world have been collecting money to assist in restoring the Sichuan province. We hope that the efforts that people all around the world are putting in will prove helpful to the restoration of Sichuan. (“ 2008 Sichuan earthquake. ” Wikipedia . 6 2008. 7 Jun 2008 .) In the end, earthquakes play an important role in our lives. Even though they are often destructive, without them, the world that we live in would differ greatly. In recent years, earthquakes have been occurring more constantly than usual, and each one having even more disastrous effects than the previous one. Some people say that this phenomenon is happening due to the increase in global warming. Although this theory has not been entirely proven, we think that as a citizen of the world, it is our obligation to take care of the Earth, and improve the worsening conditions of our planet.