EARTHQUAKES

THE REASONS AND TYPES

- The main cause of the earthquake is volcanic eruptions. (Beyza-Sakarya Secondary School)
- Tectonic movements: Some plates in the surface of the Earth are always moving and thus affecting the earth's crust. (Özay- Sakarya Primary School)
- Earthquakes are caused mostly by rupture of geological faults (Elif-Atatürk Secondary School)
- Mine blasts can cause earthquakes
 (Boran Atatürk Secondary School)
- Latvia isn't located in a seismically active zone. However, activities are also taking place here. Here loose soil and high groundwater levels, it increases the vibration of the Earth's surface due to resonant effects.. (Rēzija , Saulkrasti secondary school)
- An earthquake is target shaking of the surface of the Earth resulting from the

THE OUTCOMES

- Ground shaking is the most familiar effect of earthquakes. (Özay- Sakarya Secondary School)
- Ground rupture is another important effect of earthquakes which occurs when the earthquake movement along a fault actually breaks the Earth's surface. (Beyza-Sakarya Secondary School)
- Tsunamis can occur when severe earthquakes occur at the sea.

(Berra - Atatürk Secondary School)

 Floods may be effects of earthquakes, if dams are damaged

(Elif - Atatürk Secondary School)

- The last felt earthquake in Latvia was in 2004, but only the lamps swayed and the dishes moved. (Rēzija, Saulkrasti secondary school.)
- In Spain there are partly large earthquakes with strengths of more than 7.0, which cause damages within a

HOW TO PROTECT

- If you are in a car, pull over and stop. Set your parking brake.(Özay- Sakarya Secondary School)
- If you are outdoors, stay outdoors away from buildings. (Beyza-Sakarya Secondary School)
- If you are inside, stay and do not run outside and avoid doorways. (Boran -Atatürk Secondary School
- Don't use elevators (Ayşenur -Atatürk Secondary School)
- Drop, Cover and Hold on (Berra -Atatürk Secondary School)
- If you do not have the opportunity to be in a shelter, then hide under a table and have a distance from tall, standing furniture. (Rēzija, Saulkrasti secondary school.)
- Population's awareness and information on seismic risk are the main lessons to be





sudden release of the energy. (Ante - OŠ Vrpolje)

- The place where an earthquake occurs in the depth of the Earth is called the hypocenter. It can be just below the surface up to a depth of 750 km. (Ante OŠ Vrpolje)
- Spain lies on the Eurasian Plate just to the north of its boundary with the African Plate. The southernmost part of Spain is the zone with the highest seismicity in the country. The African Plate is obliquely converging with the Eurasian Plate at about 5 mm/year. (Aarzu - IES Corralejo, Spain)
- The strongest earthquake in Spain happened on 03/29/1954 in Cape St. Vincent with a magnitude of 7.0 on the Richter scale. (Lucía IES Corralejo, Spain)
- The territory of Poland in terms of the occurrence of seismic phenomena can be classified as asseismic and penseismic area. The earthquakes are quite rare here and they are not too strong.

- radius of over 100 kilometers. ... 17 people have died since 1950 by direct consequences of earthquakes. One earthquake can also cause a subsequent tsunami, which claimed further lifes and damages. (Andy les Corralejo, Spain)
- Some of the common impacts of earthquakes include structural damage to buildings, fires, damage to bridges and highways, initiation of slope failures, liquefaction, and tsunami. ... Building damage is also greatest in areas of soft sediments, and multi-storey buildings tend to be more seriously damaged than smaller ones. (Lucía IES Corralejo, Spain)
- Usually when there is an earthquake in Poland (natural or caused by mining activity) the damage is not so severe. People usually talk about slight vibrations, dishes that tremble in kitchen cabinets or swaying chandeliers on the top floors of apartment blocks. Only sometimes there are damages to buildings. (Ania U., Emilka G./Szkoła Podstawowa nr 1 w Nysie, Poland)
- <u>- Earthquakes are the reasons</u> for damage of buildings, of infrastructure. -

learnt from an earthquake, with the aim of drawing up an educational and training plan to reduce seismic risk in.the area. (Aarzu - IES Corralejo, Spain)

• The key to protecting the population is preparation, knowing what infrastructure can be damaged or being aware that aftershocks can cause landslides that harm people; or that, if temporary accommodation is needed, it should be located outside areas of aftershocks so as not to increase the anxiety of the population.

(Andy - IES Corralejo, Spain)

- To prepare your house for an earthquake, pay attention to items and installations in your home that can be hazardous in the event of an earthquake.
- Stay home until the earthquake is over and it's safe to go outside. Most of the injuries and wounds people suffer from earthquakes are caused by being hit by falling objects when entering or leaving buildings.
- Be prepared for aftershocks. These shocks are usually less violent than the main shock, however, they may be strong





- The zones with higher seismic activity are the areas of the Polish mountains: the Carpathians and the Sudetes and areas of mining activity, where the so-called bumps sometimes occur. (Ania U., Emilka G./Szkoła Podstawowa nr 1 w Nysie, Poland)
- Collapse Earthquakes -_are generally smaller and most commonly occur near underground mines. They are prevalent in small towns where underground mines are located. (Mary D., Mariupol comprehensive school №65, Ukraine)
- Tectonic and volcanic activities are the main causes by which earthquakes are generated, there are other factors that can originate them: -Collapse of cave roofs.
- Accumulation of sediments by rock falls on the slopes of mountains.
- Modifications of the river regime.

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- They are the reasons for landslides, rockslides and can result in floods, can trigger tsunamis. Collapse Earthquakes lead to the collapse of the roof of the mine instigating more tremors. (Mary D., Mariupol comprehensive school №65, Ukraine)
- They result in ground shaking, fires, seismic waves and landslides, as well as panic and psychological shock.
- Destroy tall buildings.

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enough to cause additional damage to an already weakened structure of buildings. (Ania U., Emilka G./Szkoła Podstawowa nr 1 w Nysie, Poland)

- Scientists should predict earthquakes and people should not buy property in dangerous places where earthquakes can happen. (Vladislav K., Mariupol comprehensive school №65, Ukraine)
- A magneto <u>amortiguator</u> is a revolutionary method of earthquake prevention that is still in full development.

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