

Earthquakes

Level: upper-intermediate (B2)

Time: 45 minutes

Aims:

- To learn about earthquakes, where they appear, what causes them.
- To learn about seismicity of the Earth
- To learn about tectonic hazards
- To calculate the scale of the earthquake and measure distances
- To look for specific information in the internet
- To transfer the information – webquest.

Language functions:

- To describe places, objects, reasons of earthquakes
- To plan and analyze
- To read for specific information
- To calculate and measure
- To use the research to do a research.

CLIL: Maths, Geography, IT technology and Biology.

Materials: web pages, PowerPoint presentation.

STAGE	AIMS	PROCEDURE	TIME	MATERIALS
Warm-up activity	To provide students with introduction to the topic	Ask your students if they know what an earthquake is and if they can give any reasons of the earthquake. Ask the class to suggest recent examples of natural disasters around the globe, and to share what they know about how tectonic disasters. Emphasise tectonic disasters and the recent Japanese earthquake in particular.	2-5 min	
Main part of the lesson	To introduce the project. To get students interested. To work with web pages. To look for specific information. To transfer the information.	1. Introduction. Show your students a PowerPoint presentation about the earthquakes. Explain the necessary terms such as: crust, mantle, inner core, outer core, tectonic plates etc.	10 min	PowerPoint presentation
		2. Task Divide your students into 3-4 groups. Each group has the same task to do- to find the information about earthquakes. Tell your students to go to page: http://www.emsc-csem.org/#2 and look at the map of Euro-Med Earthquakes. Each group has to find 1-2 places with recent earthquakes. By clicking on the dot they can have all the information about the place and scale. They can go to page: http://www.emsc-csem.org/Earthquake/Contribute/?id=375345&lang=pl and see if they can find any pictures or testimony of the witness to their earthquake.	10-12 min	Web pages
		3. Presentation After 10-12 minutes, each group should present their answers and information they were able to find in the internet.	8-10 min	

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		4. Film Tell your students to go to page: http://science.howstuffworks.com/nature/natural-disasters/earthquake.htm to watch a short film about earthquakes. After watching ask you students what they remember about this tectonic disaster.	5 min	
Wrap-up	Project - webquest	Tell your students that they will prepare a webquest on these topic- earthquakes as an example of tectonic disasters on the basis of the information they found during the lesson. The students may have 2-3 weeks to prepare the webquest in the same groups they were working during the lesson.	2-3 min	

Credits:

<http://www.emsc-csem.org/#2>

<http://www.emsc-csem.org/Earthquake/Contribute/?id=375345&lang=pl>

<http://science.howstuffworks.com/nature/natural-disasters/earthquake.htm>

Notes:

You can give students web pages or let them find their own sources. However, some guidance here is required.