

## ANNEX 1

### GROUP WORK SHEET – LITOSPHERE PLATE TECTONICS

Using the indicated sources prepare a creative presentation of issues in the classroom during the 6-8 minutes in the chosen form, eg. using Power Point presentations, Prezi, photo gallery, interactive maps, poster, mind maps.

- please **refer** to the press material "Wewnętrzny ogień czyli o tektonice płyt litosfery" ("Geografia w szkole" 3/2012) available in electronic version <http://dydaktyka.fizyka.umk.pl/Pliki/Geografia.pdf> ;
- **search** for animations or illustrations explaining the terms: rift, spreading, subduction, convection currents - they can be used in the presentation;
- **point** to the relationship between the occurrence of seismic events and the distribution of lithospheric plates and the age of the geological area;
- **point** on the places on Earth where the lithosphere grows today;
- **make the model of the cone volcano** with ignition effect (important creativity);
- **do the photo gallery** of the most famous volcanoes lying at the junction of continental plates, oceanic plate and continental place, oceanic plates and on hot spots.

## ANNEX 2

### GROUP WORK SHEET – VOLCANOES AND TYPES, DISTRIBUTION IN THE WORLD AND IN EUROPE

Using the indicated sources prepare a creative presentation of issues in the classroom during the 6-8 minutes in the chosen form, eg. using Power Point presentations, Prezi, photo gallery, interactive maps, poster, mind maps.

- **watch** the film

<http://ed.ted.com/lessons/the-colossal-consequences-of-supervolcanoes-alex-gendler#watch>

<https://www.youtube.com/watch?v=12zYcFWeWz4>

[https://www.youtube.com/watch?v=76t0DwTfi\\_Y](https://www.youtube.com/watch?v=76t0DwTfi_Y) ;

- of the basis of the map available at [http://edu.esri.pl/images/lekcje/scenariusze/AGOL\\_Wulkany.pdf](http://edu.esri.pl/images/lekcje/scenariusze/AGOL_Wulkany.pdf) **make** a list of active and extinct volcanoes in Europe;
- **prepare a mind map "VOLCANOES"** and present it in class;
- **show** the influence of volcanic phenomena on different spheres of the earth, eg. in the form of a scientific poster. You can use the manual OPERON "Ciekawi świata 1" p. 219 to 223;
- **do** the model of a shield volcano (steaming).

## ANNEX 3

### GROUP WORK SHEET – EARTHQUAKES AND TSUNAMI

Using the indicated sources prepare a creative presentation of issues in the classroom during the 6-8 minutes in the chosen form, eg. using Power Point presentations, Prezi, photo gallery, interactive maps, poster, mind maps.

- **watch** the animation <http://ed.ted.com/lessons/how-tsunamis-work-alex-gendler#review>  
<http://zmianywnaziemi.pl/wiadomosc/ciekawa-wizualizacja-przedstawia-historie-15-lat-trzesien-ziemi>
- **point** on the map of the world at least 5 urban areas that may be threatened by earthquakes, justify your choice;
- **point** on the map places seismically active in the last week and the place where the tsunami phenomenon occurred recently and explain how these phenomena are monitored;
- **watch** the animation <http://scholaris.pl/resources/run/id/61447> and on the basis thereof **prepare** of a verbal comment

#### **ANNEX 4**

#### **GROUP WORK SHEET – IS IT POSSIBLE TO TAME A VOLCANO? HUMAN ACTIONS TO REDUCE NEGATIVE EFFECTS OF SEISMIC EVENTS**

Using the indicated sources prepare a creative presentation of issues in the classroom during the 6-8 minutes in the chosen form, eg. using Power Point presentations, Prezi, photo gallery, interactive maps, poster, mind maps.

- **watch** the film <https://www.youtube.com/watch?v=iKuCkxSZXr8&list=PLPzLII-Yu2PycNn16U5iQ9Y93wiTcOJqS&index=5> ;
- **analyse** in the form of a meta plan “Tame a volcano”
- **do** the model of a caldera.