



GEAR (Global and Environmental Awareness and Responsibility) – a Toolkit for Inclusive Environmental Education

Project Element: Earth

Age: 6th graders

THE CHANGING EARTH

6th graders have been working the whole term on the Planet Earth.

The unit focuses on some processes that change Earth's surface slowly, over a long period of time, or abruptly. In order for students to develop an understanding that the surface is constantly changing, they take part in a variety of guided inquiries geared towards scaffolding this understanding. Students explore the structure of the Earth and internal and external factors that cause changes to it. These processes include earthquakes, volcanoes, landslides, plate tectonics (the Theory of the Continental Drift), faults and folds, water and wind.

Here will appear just 3 easy to carry out experiences they have done in class.

INTERNAL STRUCTURE OF EARTH

Students learn about the internal structure of Earth through different types of resources: text book, videos from the internet and did all sort of activities.

• They organized the information they got in graphic organizers:







They built a model:





























THEORY OF THE CONTINENTAL DRIFT

Movement of the Continents: process called "Plate Tectonics"





The land that is moving is the Earth's surface (LITHOSPHERE). The lithosphere moves in big chunks of land called tectonic plates. Some of these plates are huge and cover entire continents.

But, why do Tectonic Plates move?. We cannot look inside the Earth so it is difficult to make hypothesis.

Students, in collaborative groups, carried out a hands on activity, following the scientific method, to help them develop an understanding of the process taking place.

GUIDELINES FOR TEAMWORK

- 1. Listen to each other and share your ideas:
 - Everyone has something to say.
 - Respect all the ideas of your teammates
- 2. Reach to agreements:
 - having different ideas enriches us.
 - Ready to listen to your teammate ideas, even if they are contrary to ours. After examining all the ideas we will decide if they are suitable.
 - We will not always agree. In such cases we will notice that we do not agree with respect. without harming anyone. We can use these type of sentences:
 - o I'm sorry. I don't agree with you, but
 - Maybe you're right, but
 - o I think that's a good idea. what if we add?
 - o Perhaps it is better
 - We have to be open and supportive and we have to admit that others' ideas can be better.



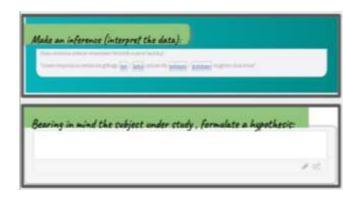
Process:

Put 1 litre of cold water and some cork stoppers in a saucepan or in a beaker. What's the temperature of the water? And what happens?

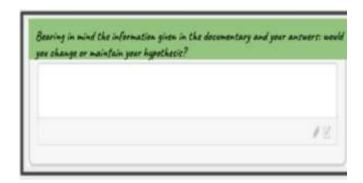
Heat the water to 60 degrees. What happens?
Increase the temperature of the water. What's
the temperature? What happens?

Increase the temperature of the water. What's the temperature? What happens?





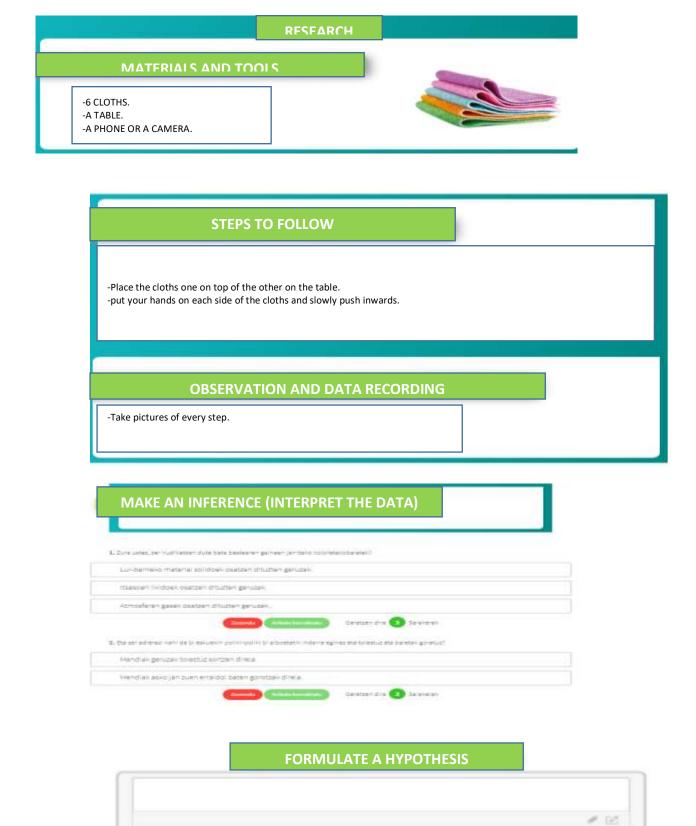








HOW ARE MOUNTAINS FORMED?



BELGIUM, FINLAND, GREECE, ITALY, SPAIN AND TURKEY

American Constant Cons



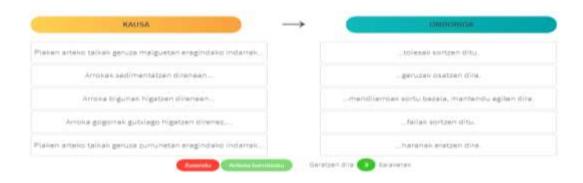
WATCH THE DOCUMENTARY AND ANSWER THE QUESTIONS:



(An english version:

https://www.youtube.com/watch?v=ioqGcV1rS1g&feature=youtu.be)



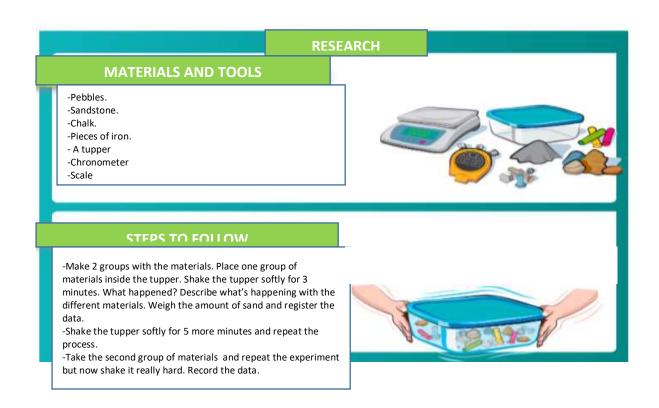


Bearing in mind the information given in the documentary and your answers: would you change or maintain your hypothesis?



HOW IS SAND FORMED?

Water and wind currents cause erosion.



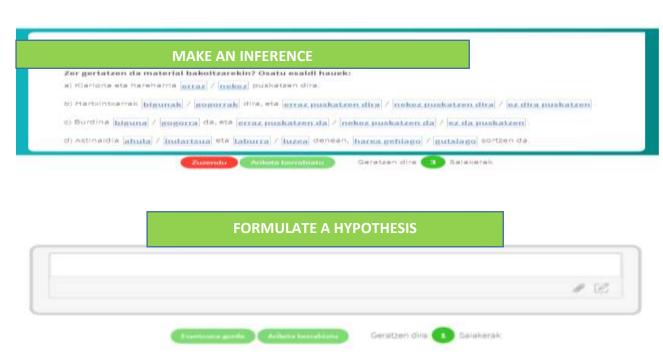












BELGIUM, FINLAND, GREECE, ITALY, SPAIN AND TURKEY

Read the text and answer the questions



Bearing in mind the information given in the documentary and your answers: would you change or maintain your hypothesis?



ARE YOU CHANGING PLANET EARTH?

Students have been working about:

- Effects of human activity on the planet.
- Overuse of the resources on Earth.
- Problems and possible solutions.

Watch the video: https://www.youtube.com/watch?v=DaFRheiGED0

