

BEYOND SCHOOL PROJECT

LESSON ACTIVITY PLAN DRAFT

ACTIVITY	From the heat of the Earth, to the light in a lamp
The aim of the activity	Let know about geothermal energy as a renewable and sustainable energy resource
Places where the event can be held	Classroom, Geothermal power station, energy museum
Age group for the activity	12-15

A. BEFORE OUT-OF-SCHOOL LEARNING ACTIVITY	
Educational tools	Datashow, computer, post it
Method, technique and strategies	Video show, Discussion
PRACTICE	
Introduction of the activity	Brief introduction about the volcanic activity in the Azores.
Development of the activity	Video showing the different secondary volcanic activities in the islands. Dialog about how the power coming from the vulcanos can be used. Answers are registered in <i>post-it</i> and posted on a board.
Evaluation of the activity	Level of interaction and answers obtained during the dialogue.

B. IN THE OUT-OF-SCHOOL LEARNING ENVIRONMENT	
Educational tools	
Method, technique and strategies	Guided tour
PRACTICE	

Introduction of the activity	Presentation of the geothermal power station as a renewable resource to produce electricity; quantity of electricity produced; percentage of production compared with the total needed; global plant of the station and brief explanation on how it works .
Development of the activity	Guided tour to a geothermal power station by an engineer of the station, showing each main component and function. Challenges to the maintenance, potential problems and how to solve it.
Evaluation of the activity	Quizz

C. AFTER OUT OF SCHOOL LEARNING ACTIVITY

Educational tools	Kit of electrical components
Method, technique and strategies	<i>Hands on</i> experiments, Inquiry based Learning
PRACTICE	
Introduction of the activity	Presentation of the challenges, rules and the available materials. Formation of the groups.
Development of the activity	Is given to each group a set of components (wires, lamps, motors, resistances, switches, etc) that can be used to build electric circuits, a card with 10 challenges/tasks and a worksheet to register the circuit diagram of each challenge, with the correct symbols. The group should complete each task with success before going to the next one.
Evaluation of the activity	The worksheets where the students draw the circuit diagrams, can be used to evaluate the activity. Each task has a score.