# Learning Unit sample

# Title: The Energy and us. Alternative energies

Class 14 years olds		
Subjects involved		
		Technology-Science-English
Number of lessons	3	Timing 6 hours
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<ul> <li>TEACHING AIMS</li> <li>To present the</li> <li>To introduce the concept and main features of the</li> </ul>	Conceptual knowledge: what learners will know by the end of the lesson/unit.	LEARNING OUTCOMES Procedural skills:  what learners will be able to do by the end of the lesson/unit	Attitudes and dispositions: what learners will be aware of by the end of the lesson/unit
<ul> <li>To make learners aware and build on prior knowledge</li> <li>To help learners understand that learning can be achieved in a second language</li> <li>To help learners understand that keeping a record of new words is important</li> <li></li> </ul>	Learners will know about  • what energy is and its different sources  • the problems that traditional sources of energies are causing in the world today  • our challenges to create and use alternative energies	Learners will be able to  observe and talk about energy looking at pictures, at diagrams or a text  discriminate between non renewable and renewable resources  understand the process of the greenhouse effect  talk about the value of renewable resources	Learners will be aware of  • what scientists say: "Climate change will put world at tipping point"  • the importance of our attitudes towards substainable development

### **Content** (subject matter):

Introduction to the concept of energy and its sources.

Understand the problems we are currently facing with traditional energies.

Understand what alternative energies are and their importance in our globalized world. Independent research.

## Communication

LANGUAGE <b>OF</b> LEARNING	LANGUAGE FOR LEARNING	
Vocabulary: essential vocabulary; names of different	Vocabulary: same	

sources

Structures: present/past tenses; comparatives Structures: same

Functions: asking for; giving information; Functions: giving reason; suggesting;

predicting; describing ...

Materials and Resources:

IWB, blackboard, beamer, worksheets, photocopies, pictures, videos (you tube)....

**Cognition** (learning and thinking processes)

*Hots* and *Lots*, problem solving, reflecting on challenges

**Culture** (developing intercultural understanding)

Use of energy resources in Italy and in other countries: similarities and differences.

LEARNING UNIT STEPS				
TEACHING/LEARNING ACTIVITIES WITH TASKS SUBDIVIDED IN SINGLE LESSONS				
Title: Energy. Concept and sources.				
Title: Problems with traditional energies.				
Title: Alternative energies.				

Example: Lesson 1

• **WARM UP OF THE UNIT**: (activating prior knowledge)

Brainstorming: What do you know about energy?

- **FIND OUT TASKS**: (giving new input, usually not through a frontal lesson, but by discovery learning)
  - **ACTIVITY 1: Starter, Introduce the topic by looking at some visuals Teacher asks questions**
  - **ACTIVITY 2: TASK 1: Definition of energy and sources**

Definition (given the first letter, teacher asks the Ss to call out the word) TASK 2: Showing a video; discussion; ask for opinion; worksheet 1;

Example: Lesson 2

- **SORT OUT TASKS:** (what you want your students know)
  - ACTIVITY 1: TASK 3: Dictation (Dicto-gloss) Teacher reads, Ss take notes, the Ss dictate the text back to the teacher
  - ACTIVITY 2: TASK 4: LET'S INVESTIGATE! Teacher asks a question; Ss use the computer to find out the answer

•	<b>ENDING LESSON</b> : Reading. Thomas Alva Edison

#### ASSESSMENT

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**Formative** assessment **for** learning (on-going process):

T. designs frequent, interactive assessment tests of students understanding. T. observes students' participation in the activities. T. takes note of their interest and gives feedback to the students.

Summative assessment of learning:

12 multiple choice questions test

Oral interview.