

Lesson Plan (1-2)

Lesson Title: Why is energy important?

General theme: Sustainable development.

Specific topic: Why is energy important?

Objectives:

- Use a systematic approach to detail their daily energy use.
- Explore where the energy they use in their daily activities, comes from.
- Pinpoint and discuss some of the ways they rely on the use of energy on an average day.
- Consider whether their energy needs are vital to life, useful or a luxury, to support their understanding of ways to reduce their energy use.

Materials Needed:

- Writing materials
- Access to research materials – books, smart devices

Introduction:

This activity focuses on how human lifestyles depend on energy production which, in turn, impacts the climate.

Outline of the lesson:

1.- Begin the activity by asking your learners what kinds of energy they use in their homes and day to day lives. It is very likely that they will go directly to electric or gas energy but encourage them to think more broadly. Different types of energy include light energy, heat energy, mechanical energy, gravitational energy, electrical energy, sound energy, chemical energy, nuclear or atomic energy. Use the Information note – Energy, to fill in gaps and explain further.

2.- Divide your group into pairs or small groups and ask them to work together to compile and write down a list of all the items that they use day to day that are powered by electrical energy. For example: fridge, technological devices, etc. Encourage them to think through an average day, from getting up in the morning to going to bed at night. How many electrical appliances and services do they use? This could be completed in a table format – example below:

Time	Activity	Energy Use
7am	Getting up	Alarm on mobile phone, switch light on.

7.10am	Freshening up	Electric shower, central heating towel rail, bathroom light, electric toothbrush.
7.30am	Breakfast	Boil kettle, grill for toast, milk from fridge, check social media on mobile device, put dishes in dishwasher.

- Provide the scenario that the energy supply to the local area is about to be severely reduced – this could be a new initiative to help fight climate change.
- Ask your learners to draw three columns on a clean piece of paper and to head these columns as vital to life, useful to have and luxury.
- Task your learners with going through their energy use lists, carefully considering and discussing as they go. Ask them to place their items under these headings.
- Your learners need to persuade and reason to reach an agreed consensus.
- They need to consider the importance of each item in sustaining a healthy life.
- Is there something they could do differently to reduce energy use. For example, does the fridge have to be super cold? Could they get dressed without the light on? Less time on online chat and more time outside meeting friends?
- Ask your learners to rank the items in each column in order of importance.
- Discuss the choices and reasoning behind them. How similar or different are each pair/groups decisions? Which items were considered as the most vital to life and which were considered the least important? Why?

• As the activity draws to a close ask your learners how do they, or could they, save energy at home and elsewhere? Why is it important to do this? What barriers sometimes get in the way of saving energy?

Assessment:

- How can we live sustainably?
- Why is it important to live sustainably?
- What can you do?
- How can you change to be more sustainable?