

Environmental Problems Lesson Plan

Aims

By the end of the lesson learners will be able to

- understand important causes of environmental problems and some solutions
- extend their understanding of lexis connected to climate change and environmental issues
- improve understanding of pronunciation information given in a dictionary
- take notes and retell information to others
- use expressions of certainty when discussing events likely to happen in the future

This lesson introduces learners to some of the main issues related to climate change. Learners focus on dictionary skills and the pronunciation of strong and weak syllables in long words. Focussing on the lexis in detail will help them recognise and use these terms outside the classroom. The reflection task encourages good learning habits and group discussions allow learners to share their opinions on changes in the future.

This lesson is suitable for teens and should be around 60-90 minutes long.

Materials

You will need a class set of dictionaries or access to computers with internet connectivity for one stage of this lesson.

Procedure

Introducing vocabulary related to environmental problems

- To help learners learn ways to record vocabulary ask them to check the meaning of the words in the diagram on **worksheet A** and discuss why they might be recorded in different shapes like the worksheet. (Global Warming is the central topic, the terms in the squares are causes and those in the rhombus shapes are solutions). With a higher level class you may give them the words and ask them to organise them into two groups.

Dictionary skills to record and practise word stress

Understanding word stress helps learners' speaking and listening skills. This stage is an optional extra if you wish to focus on dictionary work and word stress before the jigsaw reading activity.

- Model the word stress in the words from the diagram – **Global Warming**, **Pollution**, **The Ozone Layer**, **Deforestation**, **Recycling**, **Hybrid car**, **Alternative Energy**. I suggest you say the words and show the stress either using your hand –open wide for stressed syllables and closed for weak syllables- or by clapping on the stressed syllables.
- Worksheet B shows students how to find the word stress in the dictionaries your class are using (all the vocabulary can be found in Longman Learner's Dictionary). Get them to find the stress for the words below and record them in a word stress table –the class can make a large poster. (Option to divide the words amongst groups and they compile all answers in one large poster

that they can copy down or learners can mingle and find out the answers by saying the words to each other and completing their worksheet).

	al	ter	na	tive
		glo	bal	
		cli	mate	
		de	sert	
	e	lec	tric	
e	lec	tric	ity	
	ex	tinc	tion	
gen	er	a	tion	
	po	llu	tion	
	po	llu	ted	
ra	di	a	tion	
ul	tra	vio	let	
		warm	ing	

- You might have time at the end of the lesson or in a following lesson to give students an opportunity to review and internalise the spelling of these words through games such as hangman or battle ships.

Environmental problems jigsaw reading

- On worksheet B there are 6 laminated cards with more detail on the topics from worksheet A. Individuals will only read one or two cards and share the information with their group.
- I suggest you divide the class into 3 groups and give each group 2 of the cards (ensure there're enough cards for each learner to read at least one card at the same time). Explain they have to read and summarise the main information from their text. They should make notes in the diagram on worksheet A to help them remember. Monitor and help understanding if necessary. (Option for a higher level class: ask them to find two main problems or solutions in each card).
- Ask learners to put their cards under their books and regroup the learners (so the new group has one member from each of the original groups). Ask students to explain their topics to each other and make notes on worksheet A. (You should let them know there is going to be a quiz later). They should write in note form. Only interfere if they really can't understand.

The environment quiz

The quiz will test the learners' understanding of the texts and ensure they share information from their reading texts. The quiz will be set up like a race and ought to be competitive and so allow groups to name themselves, draw up a score board etc.

- Make enough copies of the quiz on worksheet D for one per group (coloured paper helps). Cut up the questions. The teacher should keep the piles of questions. (shuffling the questions prevents cheating later on and encourages retaining information if they do overhear).

- One member of each group comes forward and takes one question from their coloured pile.
- They return to their group and discuss the answer and write it down.
- Once the group has written their answer a runner should take it back to the teacher (forming a queue at the teacher's desk)
- The teacher should check the answer and either accept the card and give another question or reject the answer and send the runner back to the group with the same question (feedback such as there's one more important thing missing helps).
- The winning group is first to complete all questions correct. They can then help check the answers to the other teams until most of the questions have been done by all teams.
- Finish by giving everyone a copy of all the articles. Depending on time, you could give a few minutes to skim through them.

Talking about the future – expressions of certainty

- Learners look at the four sentences in worksheet E.
- Elicit where to put the underlined expressions on the cline.
- Ask students to put the other expressions on their cline and check as a whole class. The cline is divided into three sections 100 % certain, 50% certain and uncertain as some expressions are very similar and so learners can put them side by side on the cline rather than trying to label one as more certain than another. (e.g. might and maybe both fit in the 50% section and don't need to be differentiated).
- You can check their understanding with questions such as:
Does might mean the same as maybe?
Does I'm not sure mean the same as definitely not? Etc.

Group discussion about the future

- Students put a) b) or c) next to the sentences on worksheet F. Then discuss in pairs/groups and learners make a large cline (students can draw the cline or you can print worksheet G on A3 paper) and discuss where to put the expressions on it. This makes a good group discussion. To generate a whole class discussion at the end, you can send members of different groups around the tables to compare the clines.
- NB sunbathe –has a long vowel sound in the second syllable
- You may wish to make this more of a game where the phrases from worksheet E are put on cards and students turn a card over and then chooses a sentence from worksheet F; then they read aloud their sentence continuing with “because...” and giving a reason which others in the group have to agree makes sense before moving on.

Mindmap – optional extra for learner training on reflective practice

Mindmaps are great tools to help learners organise and summarise information. This activity allows them to work alone (or in pairs) to review the information from the whole lesson and identify the results of different environmental problems. They should record the information under the headings, description, predictions and solutions.

If you have access to the internet you can get students to use www.text2mindmap.com or www.imindmap.com mindmapping tools. For example:

Mindmaps are just one way of reflecting on a lesson, you might give your learners a choice of different techniques so they can choose how they will record the information that's most meaningful to them.

The screenshot shows the Text2Mindmap website interface. On the left, there is a text input area titled "Outline your text" with a "Convert to Mind Map" button. The main area displays a mind map with a central node "Ozone layer".

- Description**
 - thin layer around the earth
 - getting thinner more ultraviolet radiation reaches earth
- Predictions**
 - I am certain that more people will die from skin cancer
 - I think that people will wear long sleeved swim suits
 - People won't sunbathe anymore
 - I am sure the climate will be hotter
 - It's possible that the UK will become a desert
- Solutions**
 - Find suitable places to throw away batteries
 - Use roll on deodorant
 - Reduce factories releasing CFC gases
 - Only buy modern fridges
 - Use less plastic wrappers, bags etc.