### Anexo _28 - Plano de Aula – 11ºB1

#### Lesson Plan

<table>
<thead>
<tr>
<th>Unit 4</th>
<th>Lesson number</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>The world around us</td>
<td>97th and 98th Lessons</td>
<td>9th May, 2017</td>
<td>90’</td>
</tr>
</tbody>
</table>

#### Summary

Introducing the topic – The world around us. Brainstorming. Reading comprehension and oral discussion. Presentation of a group work project.

#### Aims

- get familiar with the topic approached and studied during the next classes

- infer meaning from images

- develop their thinking skills about the subtopics

#### Procedures/Strategies

- The T greets the Ss and writes the summary on the board, while attendance is taken.

- The T starts the lesson by introducing herself and saying she will be working with the Ss for the next 3/4 lessons with the topic The world around us which will include oral or/and written discussions under some other subtopics. By then, the T challenges Ss to give their interpretation about the following projected images using a brainstorming activity.

- Meanwhile, Ss are asked the following questions to elicit their critical thinking:
  - What do you see in pic.1 and 2? What is happening?
  - Can these realities be a threat to our planet Earth?

<table>
<thead>
<tr>
<th>Interaction</th>
<th>Aids</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>T ↔ Ss</td>
<td>Board</td>
<td>5’</td>
</tr>
<tr>
<td>T ↔ Ss</td>
<td>Whole Class</td>
<td>5’</td>
</tr>
<tr>
<td>T ↔ Ss</td>
<td>Video Projector 4 Images</td>
<td>20’</td>
</tr>
</tbody>
</table>
- expand vocabulary and get the global meaning about the new topic

- While Ss give their first impressions and comments on the images, the T collects all the emerging vocabulary on the board using an associogram in order to connect Ss’ contributions with the following subtopics, taking all the advantage she can from Ss’ critical thinking.
  (T will help Ss with any additional vocabulary)
  **Subtopics:**
  - Threatens to the environment
  - Population issues
  - Bioethics
  - Civil action/contributions

- learn more about environmental issues

- T says that environmental problems can be found in all areas of the world; therefore they are going to read some paragraphs about environmental issues. Yet, she first hands out a Quiz - *How environmentally conscious are you?* - (Scores will be revealed and short comments will be made about them)

- While reading the paragraphs, Ss will be asked some questions to check their comprehension: (all the emerging vocabulary will be added in the associogram on the board)

  1. Name three negative things that may happen if the Earth gets warmer and warmer.
  2. What are fossil fuels, and what happens when we burn them?
  3. How warm may the Earth’s temperatures become by the end of this century and why is this dangerous?
  4. Name six things you can do to use less energy at home.
  5. Why is eating meat harmful for the environment?
  6. What size area of trees is cut down every year and what effect does this have on the environment and nature?
- give opposites of some words from the texts
  - In addition, the T checks some vocabulary by asking:
    - What are the **opposites** of these words/expressions from the article?
    - a. have risen
d. flooding is becoming worse
    - b. damaging
e. low-lying areas
    - c. releases
    - f. turn down

<table>
<thead>
<tr>
<th>Enlarge general culture about environment issues by doing a crossword puzzle</th>
<th>The T hands out a crossword puzzle to help Ss expand their environmental vocabulary by doing an amusing activity in pairs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair Work</td>
<td>Crossword puzzle</td>
</tr>
</tbody>
</table>

- do an online ecological test and become environmentally aware
  - By the end of the class, the T makes a proposal for a classroom interactive activity, by saying:
    - Our impact on nature is called our ‘**ecological footprint**’. To find out what your footprint is, let’s go to: [http://independent.footprint.wwf.org.uk](http://independent.footprint.wwf.org.uk) and do the online test. Think about your family and the people in your house and answer the questions. (Ss start doing the online test in class and will finish it at home to find out the results)

<table>
<thead>
<tr>
<th>- develop critical thinking</th>
<th>At the end of the class, the T addresses the Ss with a direct question: Bearing in mind the article <em>Earth in danger</em> and all the possible threats to the planet, which issue do you think can cause most damage to the environment in a short term period? And in a long term period? State your reasons (global participation will be encouraged)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole class</td>
<td>5’</td>
</tr>
</tbody>
</table>
Anexo_30 - Quiz

How environmentally conscious are you?

1. Circle your answers and then add up your points.

<table>
<thead>
<tr>
<th>How often do you ...</th>
<th>always</th>
<th>sometimes</th>
<th>never</th>
</tr>
</thead>
<tbody>
<tr>
<td>... drink bottled water?</td>
<td>-1</td>
<td>0</td>
<td>+1</td>
</tr>
<tr>
<td>... unplug/disconnect your TV over night?</td>
<td>+1</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td>... take a bath instead of a shower?</td>
<td>-1</td>
<td>0</td>
<td>+1</td>
</tr>
<tr>
<td>... go to school by car?</td>
<td>-1</td>
<td>0</td>
<td>+1</td>
</tr>
<tr>
<td>... walk or ride a bike to school?</td>
<td>+1</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td>... recycle paper?</td>
<td>+1</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td>... recycle bottles?</td>
<td>+1</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td>... give old clothes to charity?</td>
<td>+1</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td>... eat meat?</td>
<td>-1</td>
<td>0</td>
<td>+1</td>
</tr>
</tbody>
</table>

2. Now share your score with your partner and comment on it: __________

Thank you for your cooperation
Anexo_31 – Earth in Danger

The year is 2080, and the world is a very different place. Sea levels have risen and flooded millions of homes. London, New York and many other cities are underwater. The Earth has become a lot warmer, and heatwaves are killing crops. People are fighting because they don’t have enough food or clean water. Malaria is common in Europe, and many of the animals and plants we know have disappeared forever. This sounds like the story of a Hollywood film. But it could really happen if we keep damaging the environment.

Many issues affect the environment but which ones could cause the biggest problems in the future? Claire Addison, 23, from Edinburgh, works for an organization called Envision in London, which teaches teens about environmental issues. “The biggest problem for our planet is climate change,” Claire explains. “Greenhouse gases are causing higher temperatures around the world, which is causing ice to melt and sea levels to rise.”

Many people talk about factories and industry but the truth is: we all cause climate change. Lots of our favourite things – like mobile phones, televisions and computers – need energy to work. Most of this energy comes from burning fossil fuels like coal, oil and natural gas, which releases carbon dioxide (CO₂), methane and other gases into the air. These greenhouse gases trap the heat from the sun in our atmosphere, which makes our world warmer.

We all contribute to climate change whenever we:

• travel by car, by plane or on public transport.
• take a bath or shower with hot water.
• turn on the heating.
• use electricity that comes from fossil fuels.
• buy products that need lots of energy to make and/or come from far away.

What in the world is happening?

There are already signs that our climate is changing. “In Bangladesh there are more storms, which makes it difficult to grow crops,” says Claire. “Flooding is becoming worse, and people are dying of diseases found in the water.” Some scientists think the Earth could be six degrees warmer by 2100. That doesn’t sound like a lot, but it would have disastrous effects:

Wild weather: There could be more drought and desert in Australia and Africa, and dangerous heatwaves in Europe. Or the Gulf Stream, which normally keeps Northern Europe warm, may change and make Europe a lot colder. This is not only bad for us – it can also badly affect animals and plants.

Wet wet wet: Sea levels could rise, covering low-lying areas like Bangladesh, the Netherlands and Florida. Even London and New York could be flooded.

Death and disease: Malaria and other tropical diseases could spread to Europe.

Using too much?

Do you throw things away even though they’re not really broken? Do you buy more food than you can eat, and use more water than you need? Most people don’t realize how much they waste. But we’re cutting down trees faster than they can grow back, using more energy than the planet can give us and producing more rubbish than nature can deal with.
The facts

If we keep using more than nature can give us, there'll soon be nothing left.

**Goodbye green:** We've already lost two thirds of the world's forests. Every year, we cut down 160,000 square kilometres—an area the size of England and Wales! This is also bad news for climate change because forests absorb a lot of CO₂.

**Helpless habitats:** When we cut down trees or build new things, we destroy the natural habitats of animals.

**Dirty dumps:** Our rubbish dumps pollute the air and land, and our plastic ends up in the sea. There are even rubbish dumps for old aeroplanes and ships.

You can help!

Our homes produce around 30 per cent of CO₂ emissions. Everyone knows we can save energy by turning off lights and using energy-efficient light bulbs. But there are lots of other simple things you can do:

- Unplug your television and laptop. They use energy even when they're turned off. Always unplug your phone charger after your phone is charged.
- Turn down the heating by one degree. This can reduce your energy use by ten per cent!
- Take a short shower instead of a bath. A bath uses about 100 litres of hot water.
- Put the lids on pots and pans when you're cooking.
- Keep your fridge full. Empty fridges need more energy to stay cool.
- Don't boil more water than you need.

How to use less!

We need to use less. “We should live in a way that leaves enough for future generations,” says Claire from Envision. Recycling more and driving less are good ways to help. But try out these tips too:

- Use things for as long as possible. It takes energy to make new products.
- Eat less meat! Meat production uses lots of energy, and rainforests are destroyed to make space for cattle.
- Wash fruit and vegetables in a bowl, then use that water for your plants.
- Turn off the tap while brushing your teeth. Use a normal toothbrush instead of an electric one.
- Drink tap water instead of bottled water.
- Keep water in the fridge so you won't have to run the tap until the water gets cold.
- Take your own travel mug to the coffee shop instead of using paper cups.

Population zero

What would nature do if we disappeared and didn't use up any more resources? Without humans, plants and wild animals would take over our cities. Within five years, parks would be overgrown and plants would cover our roads and buildings. After 500 years, our cities would be covered by forest. After 1,000 years, Manhattan would look like an area of countryside. And 10,000 years after we disappeared, there would be very little to show that we had ever existed.
Anexo_32 - Crossword puzzle: What does it mean?

Write the words from the article into the crossword.

**Across**
1. to take in a gas, liquid or other substance.
6. the air round the Earth or round another planet.
10. causing a lot of damage or harm.
12. to make air, water or land too dirty and dangerous for people to use in a safe way.
13. a long period of time when there is little or no rain and crops die.
14. places that particular animals usually live in or particular plants usually grow in, for example a desert, forest or lake.

**Down**
2. places where large amounts of rubbish are taken, usually outside a town.
3. something that works well and uses the power supply (electricity, gas, oil, etc.) in the most effective way.
4. a serious illness caused by being bitten by a mosquito, usually in a hot country.
5. do something to help make something else happen, even if you don’t want to.
7. substances, especially gases, that go into the air.
8. to use more of something than you need.
9. when land is underwater as a result of lots of rain or rising water levels.
11. subjects that people discuss or argue about, especially relating to the environment, politics, etc.