# **Discovery Class1: Plastic Planet**

<u>Learning objectives:</u> Understanding the basic principles of sustainable development and how it applies to our everyday life.

Target Vocabulary: nouns cardboard, oil, packaging, box, can

<u>Previous knowledge:</u> Present and past simple, daily routines and vocabulary for food and shopping. Imperatives 'must' and 'have to'

Cognate words: plastic, sustainable, packet, metal, petroleum

	Activity	Materials	Time
			(Minutes)
Introduction (incl. Class rules)	Introduce Topic of the day: Sustainable Development Translate & check understanding. Explain basic concept.	S.D. statement poster	10
Presentation Part 1: Daily life	'Let's go shopping' Write a weekly list for a family. Elicit ideas from the class and write on the board. Points for each answer.	Board & Pens	5
Presentation Part 1: Rubbish	Packaging: practice the vocabulary.  Explain rubbish, garbage and waste is all the same thing.	Board & Pens Examples of packaging.(realia or pictures)	15
	Look at the list and elicit packaging for the items. Show the bag of 'rubbish', and imagine what the total would look like for the whole class.	Bag of Rubbish (clean!)	

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Video: How is Plastic made?	<ol> <li>Look at the materials of the packaging, where do they come from? Show most are plastic.</li> <li>How is plastic made? Watch the video</li> <li>Is plastic production sustainable for the future?</li> <li>Make the point that oil is a limited resource.</li> </ol>	Video: How is Plastic made?	15
Presentation Part 2: 'Our Responsibility'	Can we continue producing this amount of plastic? What will happen? Reference the S.D. poster Elicit ideas, write on the board if need be.	Poster Facts from the video.	5
Group Work (speaking and discussion)	In groups of 4-5, the students discuss what changes we can make, focusing plastics.	Pens and paper	10
Video. (Listening, reading)	'Plastic Planet' Watch through. Check understanding.	Video: Plastic Planet	10
Group Work (speaking and discussion)	Groups give their feedback on their ideas. Award Points		10-15

## Notes and explanations.

There is a high emphasis on student participation during the class. This is to encourage participation and for them to achieve the learning objectives through discovery rather than just an impartation of information.

## Introduction.

The teacher will introduce the norms and rules for the class, emphasising that mistakes are an opportunity to learn, mutual respect between peers, and for the teacher when speaking.

After writing 'sustainable development' on the board, the teacher will let the class guess a definition. They then explain 'development' and let them guess again, finishing with 'sustainable' if need be. The teacher then shows the UN definition of sustainable development, checking understanding. Using this as a basis, the teacher can then explain the basic concept of how a society needs to develop and grow, but must consider the needs of future generations or other societies that it has an impact on. The explanation needs to be kept short and simple

## Presentation Part 1: Daily life

'Let's look at modern life and modern needs. Let's go shopping'

Students are asked to collective suggest items for the shopping list. The teacher can ask questions like 'What do you like to eat? Do you need toilet paper?...' to help the class along and to tie in with specific rubbish in the bag for later on. The list should include:

- Food like meat, fruit, bread, pizza...
- Shampoo and cosmetics
- Cleaning supplies.

## Presentation Part 1: Rubbish.

The teacher shows different types of packaging using the realia or pictures to include the vocabulary plastic, plastic bag, plastic bottle, cardboard box, metal can, glass jar. They practice the vocabulary with the class.

Game: Handing volunteers one item each, the have to listen for the word and hold the item up. If they miss the word they must hand the item to someone else. The students receive a point for each time the hold up their item.

The teacher then looks down their shopping list on the board with the class and they have to say what type of packaging the items have. The teacher will not have to do the entire list, just enough to give the students the idea that all the items come in some form of packaging.

'We go shopping on Saturday. But what do we have by Wednesday?'

The teacher brings out a dustbin or dustbin bag of clean rubbish: pizza and cereal boxes, washed out juice cartons, bottles, plastic bags and containers, and jars. The class has to imagine that this is just for one family, so how much rubbish would all the families represented in the room produce? (About 25 families)

### Video: How is Plastic made?.

The teacher shows that the majority of packaging uses plastics and asks the class where plastic comes from? Cardboard is made from wood like paper, but what is plastic made of?

The teacher shows the video and reads aloud the text.

#### After the video:

- They check the understanding of 'oil' (petroleum)
- Is oil a limited or unlimited material?
- Is plastic production like we have now sustainable for the future? With reference to the definition poster from the introduction.

https://www.youtube.com/watch?v=f3BjWvTT9Ro&index=29&list=PLyhZvHMQQuXPrbE7pZvT546l5wjp4FGtu

## Presentation Part 2: 'Our Responsibility'.

Continuing on from the video, the teacher guides the class in discussing what could happen if we continue to produce plastic on the current scale and whether that is a form of sustainable development.

Give reference to the definition of sustainable development and the facts from the video about the US:

- 93 % of plastic is not recycled.
- 60% of garbage is recyclable
- The US produces 230 millions tonnes of garbage a year
- Recycling 1 tonne of plastic will save 163 barrels of oil.

## **Group Work (speaking and discussion)**

The group works leads on from the class discussion.

Each team is divided into two groups. The students work together in their groups suggest what changes society can make.

People still want to buy their shopping, but if the level of plastic production is not good for society now or for future generations and if oil is not a sustainable material, what can we do to change the situation?

## Video: Plastic Planet

The students watch the video.

https://www.youtube.com/watch?v=73sGgmZoMBQ&index=21&list=PLyhZvHMQQuXPrbE7pZvT546l5wjp4FGtu

## Group Work (speaking and discussion)

After the video, each group tells the class their ideas for change. The teacher looks at how they are similar to those presented in the video. Encourage the students in their good ideas.