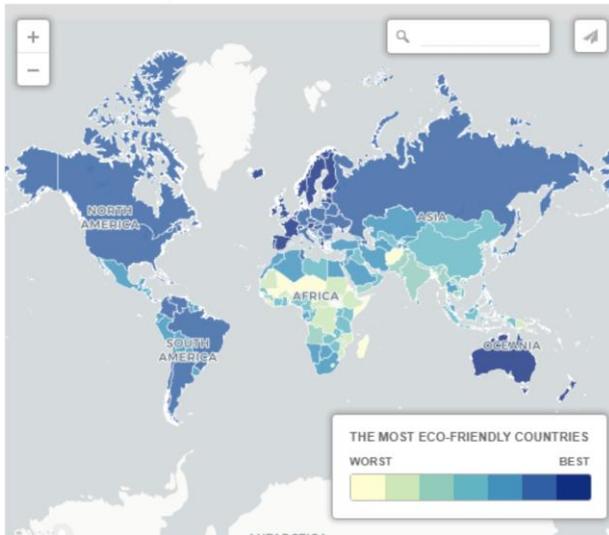


## Year 6 Geography Planning: Cycle 1

<b>Concept: Communities Rights &amp; Responsibilities</b> <b>Equality Link:</b>			
<b>Inquiry Question :</b>	<b>How can we promote environmental sustainability in our community?</b>		
<b>Quiz wk 5 :</b>	<b>low stakes 10 question quiz</b>	<b>Final Assessment Quiz :</b>	<b>low stakes 10 question quiz</b>
<b>End of Cycle outcome:</b>	<b>Leaflet and graph.</b>		
<b>Oracy objective:</b>	<b>to be able to discuss sustainability using tier 2 and 3 vocabulary.</b>	<b>Oracy outcome:</b>	<b>Informative leaflet which they can talk about</b>

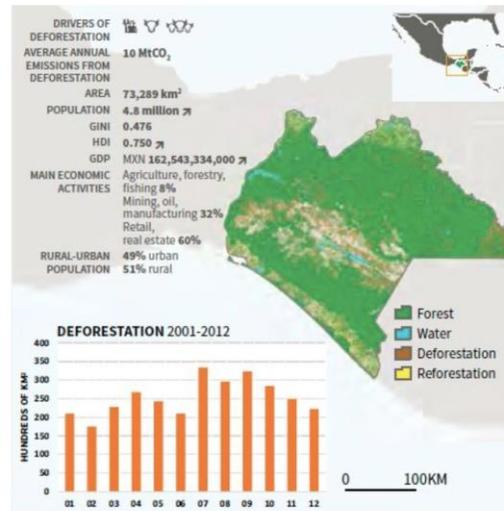
## Visual Concepts:



### Primary forest loss and tree cover loss: Mexico

Annual loss of primary forest cover and tree cover for Mexico by year. All area figures are in hectares (ha)

Year	Primary forest	Tree cover (30%)
2001		158,653
2002	14,329	159,118
2003	17,925	152,878
2004	18,119	170,246
2005	23,058	170,246
2006	19,398	179,458
2007	28,987	219,059
2008	29,568	184,749
2009	46,684	281,887
2010	27,933	167,089
2011	29,571	187,186
2012	28,226	175,087
2013	36,628	219,485
2014	23,837	171,130
2015	32,682	198,002
2016	50,145	274,798
2017	55,702	299,399



### Key Vocabulary & definition:

### Knowledge:

<http://news.bbc.co.uk/1/hi/world/americas/1854188.stm>

<p><b>Tier 2</b></p> <p>Locality, compare, contrast, describe, suitable, location, causes, landscape, oceans, continent, country, UK, atlas, rainfall, economy, ethical, hills, damage, improve, location, cities, energy, report, findings, Energy, depletion</p>	<p><b>Tier 3</b></p> <p>physical geography, choropleth map, North America, Southern Hemisphere latitude, longitude Equator, Northern Hemisphere, climate zones, land patterns, digital mapping, sustainable development, renewable energy, deforestation.</p> <p>Sustainability – the ability to be kept a certain level (noun)</p> <p>Sustainable – able to be kept a certain level (adjective)</p> <p>Environment-surroundings</p> <p>Resources – things that people can use from the natural environment</p> <p>Renewable – the supply can't be used up</p> <p>Finite- limited in size or amount</p> <p>Solar – from the sun</p> <p>Substitute - something used in place of something else</p> <p>Biodegradable- able to be broken down by bacteria – avoiding pollution.</p>	<p>Chiapas is the 8th largest state in Mexico, with a surface area of 73,282 km<sup>2</sup>, which represents 3.8% of the total surface area of Mexico. Chiapas contains rich biodiversity in its cloud forests, temperate forests, natural and cultivated pasture, humid and sub-humid rain forests. These different types of forest cover account for 42% of the total area of the state. There are 47 Natural Protected Areas, which cover roughly 20% of the state.</p> <p>Chiapas is one of the five lowest performing states in Mexico in terms of educational performance, health and economic development. But it is also second in terms of biodiversity and number of endemic species and indigenous villages. It is rich in water and mineral resources, and a major provider of ecosystem services. However, native ecosystems are being degraded rapidly and there is high pressure being put on natural resources from drivers such as agricultural expansion, at both large and small scales. Currently, 60% of total greenhouse gas emissions of the state come from agriculture, forestry and land use (AFOLU).</p> <p>Chiapas is an early-action target region; the state has a deforestation rate of 333 km<sup>2</sup> per year. According to official figures, Chiapas' emissions from the AFOLU sector are 16.1 MtCO<sub>2</sub>e per year, representing 57% of total state emissions. Subsidies to increase field productivity outpace incentives to promote conservation and sustainable production by 70%</p> <p>Be able to label continents and identify where Mexico and the UK are on a world map.</p> <p>Know that a choropleth map represents data visually using different shades of colour to show density of information.</p> <p>Environmental sustainability is defined as responsible interaction with the environment to avoid depletion or degradation of natural resources and allow for long-term environmental quality.</p> <p>Know some physical features of Mexico including: located in north America, to the south of the united states of America and north of Guatemala.</p> <p>Tropic of cancer runs through the world making it one of the hottest countries in the world.</p> <p>In the mountainous areas of northern Mexico, winter seasons are very cold and usually freezing during the night.</p>
<p><b>Key Texts:</b></p>		

## Ordered books from the library...

Mexico has the most northerly rainforest in the world. The Lacandon Jungle is the most famous Mexican jungle and is one of the last places where you can find jaguars. There are many other endangered species here. Mexico has 9,330 kilometres of coastline. Most of the coastline faces the westerly Pacific Ocean and the Gulf of California, but the east coast faces the Gulf of Mexico and the Caribbean Sea.

There are currently 48 active volcanoes in Mexico. The last volcanic eruption was in 1982 at the Chichón volcano in Chiapas. It had been inactive for the previous 550 years. The eruption killed around 2000 people and destroyed 400 square kilometres of forest.

Deforestation is the removal of a forest or stand of trees from land which is then converted to a non-forest use. Deforestation can involve conversion of forest land to farms, ranches, or urban use. Mexico has lost more than half of its natural forests. An average of more than 705 051 ha per year of forests was lost between 1997-1993. This rate then increased to 819 591 ha per year from 1994-2000, according to a recent study by Herrera (2003). During the last couple of years, the average number of hectares deforested reached close to one million per year. This is a tragedy, as along with the forest crop, top soil, habitats, biodiversity, time and money are lost. Man-made deserts are growing in Mexico, the commercial timber line is moving up the slopes and the forest frontiers are being pushed up the mountains by pressure from farmers, cattle raisers, fruit orchards, coffee plantations and local landless fieldworkers.

Some forest management plans are causing genetic erosion through dysgenic selection, which eventually will degrade the forest productivity and sustainability in the long term.

The most common causes of deforestation and forest degradation are the following:

- illegal logging
- legal and illegal land clearing for farming and animal grazing;
- forest fires and pest attacks;
- lack of ecological and forest education of the owners;
- city building.
- selective logging (always cutting down the best trees);

What is recycling?

When something is recycled it is reused or turned into something else. Materials such as glass, metal and paper are quite easy to recycle, and certain types of plastic are too.

Objects that aren't recycled, such as things that go in the rubbish, are taken to landfill sites. These are places where rubbish gets buried and left to rot away and biodegrade.

#### Single-use plastics

Some plastic objects are only used once then thrown away. These are called single-use plastics and include things such as plastic bags, bottles, straws and crisp packets. These objects cannot be recycled and can take hundreds of years to biodegrade. It is not sustainable to keep on using them - and if we do, we could permanently harm our environment. Plastic is also harming animals and wildlife in rivers, lakes and oceans - they can get tangled up in plastic objects or can even eat them. However, by recycling, reducing the packaging we use and reusing things such as bags and bottles, hopefully together we can all help save our planet.

Natural resources are materials or substances that are produced by the environment. Humans use natural resources to survive. They can be used to heat our homes, transport us around the world, feed us and clothe us.

The UK has a lot of natural resources, including fossil fuels for energy, crops for food, and livestock for food as well as clothes.

Resources related to farming are called agricultural resources, these include:

crops which produce wheat and barley, livestock such as cows, pigs and chickens which produce dairy, eggs and meat, sheep which produce wool and leather

Resources found underground are called geological resources, these include:

minerals like china clay

metals like tin

fossil fuels like gas and oil

#### What are fossil fuels?

Much of the world's energy is produced by burning fossil fuels such as oil, coal and gas. These natural resources are formed from the remains of plants and animals that died millions of years ago. Burning fossil fuels creates carbon dioxide gas, which is damaging to the environment and is making the Earth warmer than it should be. Once fossil fuels are gone they cannot be replaced.

#### What is renewable energy?

Renewable energy is a natural source of energy that will never run out. Wind, the Sun and water are renewable energy sources that can be used to create electricity. These sources of energy are much cleaner to use than fossil fuels because they do not produce harmful gases that cause pollution and climate change.

## Lesson-by-lesson plan: Cycle 1

w/ b	Main composites	Must Do	Activities	Resources needed (including geographical sources)	What is in books?
1	To understand sustainability and why it is important		<p>Show chd UK and Mexico on Google Earth. Introduce topic.</p> <p>Introducing sustainability video  <a href="https://www.youtube.com/watch?v=gTamnlXbgqc">https://www.youtube.com/watch?v=gTamnlXbgqc</a></p> <p>Discuss</p>	Tier 2 and tier 3 words printed.	<p>Definition of tier 3 vocabulary.</p> <p>Pre-question (to be asked at the end of the topic)</p> <p>Why do you think sustainability is important?</p>
2	To reflect on the sustainable development goals and what they mean to me?		<p>Introduce global goals</p> <p><a href="https://worldslargestlesson.globalgoals.org/wp-content/uploads/2020/08/Introducing_30_Lesson_Plan.pdf">https://worldslargestlesson.globalgoals.org/wp-content/uploads/2020/08/Introducing_30_Lesson_Plan.pdf</a></p> <p>Video introducing goals  <a href="https://worldslargestlesson.globalgoals.org/resource/malala-introducing-the-the-worlds-largest-lesson/">https://worldslargestlesson.globalgoals.org/resource/malala-introducing-the-the-worlds-largest-lesson/</a></p>	Tier 2 and tier 3 words printed.	Chd to write a paragraph what the goals mean to them in the style of a tweet.
3	Use mapping skills to identify which		Interpret data from a digital map based on environmental sustainability.	A choropleth map with information	What is a choropleth map?

	<p>countries are environmentally sustainable</p> <p>Interpret data from a choropleth map</p>			<p>about countries sustainability.</p>	<p>Answer questions about the map given to them and write full answers in book.</p>
4	<p>Understand how some of these aspects have changed over time.</p>		<p>Focus on Mexico - identify topological features and map out how deforestation has affected the landscape over time.</p>	<p>Digital map images over time of deforestation in Mexico.</p>	<p>Pictures on then and now. What can you learn from this?</p>
5	<p>Understand how some of these aspects have changed over time.</p>		<p>What does 'deforestation' look like in your community</p>		
6	<p>Understand how some of these aspects have changed over time.</p>		<p>What is an energy source? Sustainability and <b>natural resources</b>. Learn what that means and consider the impact on the environment. How Mexico does it? How UK does it?</p>	<p><a href="https://www.bbc.co.uk/bitesize/topics/zshp34j/articles/z62qy9q">https://www.bbc.co.uk/bitesize/topics/zshp34j/articles/z62qy9q</a></p>	<p>Comparison paragraph of differences between Mexico and UK</p>
7	<p>Understand different form</p>		<p>Sustainability and <b>plastics</b> How Mexico does it? How UK does it?</p>	<p><a href="https://www.bbc.co.uk/bitesize/topic">https://www.bbc.co.uk/bitesize/topic</a></p>	<p>Comparison paragraph of differences between Mexico and UK</p>

	of energy sources			s/zshp34j/articles/z6m7vk7	
<b>8</b>	Understand different form of energy sources and comparing different communities		Non-renewable energy and its impact on the community. Does Mexico use a lot of <b>non-renewable energy</b> ? Does the UK?	<a href="https://www.bbc.co.uk/bitesize/topics/zshp34j/articles/zntxgwx">https://www.bbc.co.uk/bitesize/topics/zshp34j/articles/zntxgwx</a>	Comparison paragraph of differences between Mexico and UK
<b>9</b>	Understand different form of energy sources and comparing different communities		Consolidate information and draw graph to compare sustainability of Mexico to the UK		Graph
<b>10</b>	Community aspect		Create leaflet to advise local community on ways they can be more sustainable		Leaflet