

Context						
Unit		Energy and Sustainability				
Assessment		‘Humans are not capable of living sustainably’. How much do you agree with this statement?				
Concepts - How does this unit fit in?		<u>Population</u> KS1 - What’s it like where we live? Y3 Villages, Towns and Cities - Where do people live? Y4 Migration - What is migration? Y5 Slums - What is a slum? Y6 Population - How and why has population changed?	<u>Settlements</u> KS1 - What’s it like where we live? Y3 Villages, Towns and Cities - What affects where people live? Y3 Mountains, Volcanoes and Earthquakes - Do the benefits of living near a volcano outweigh the risks? Y4 Rivers - Why are rivers important to people? Y4 Migration - What causes people to migrate? Y5 Slums - What challenges are there for people living	<u>Environment</u> KS1 - Hot and Cold Places Y3 Water and Weather - Y4 Natural Resources - Y5 Biomes - Why are biomes under threat? <b>Y5 Energy and Sustainability</b> Y6 Globalisation		
Pearson Lesson	Learning Intention	Geography Skills Skills Progression	Knowledge Concepts	Diversity	Local Geography	Curriculum Links
1	What is sustainability?	To explain what sustainability is and why it is important	Human and Physical	Environment Population		Y4 Geography: Natural Resources
2	Are fossil fuels sustainable?	To discuss the advantages and disadvantages of using fossil fuels for energy	Human and Physical	Environment		What energy resources do we have readily available in West D? Y4 Geography: Natural Resources
3	What are renewable sources of energy?	To research and compare different renewable sources of energy		Environment		
4	What can we learn from Curitiba?	To compare sustainability in Curitiba and West Drayton	Human and Physical Mapwork	Environment Settlements Population		Make comparisons between Curitiba and West Drayton Protests: Changing Britain
5		Sustainability research / project				
6	Assessment: ‘Humans are not capable of living sustainably’. How much do you agree with this statement?			Environment Settlements		

## Lesson 1

<b>Pearson Lesson</b>	What is sustainability?									
<b>Learning Intention</b>	To explain what sustainability is and why it is important									
<b>SOLO SC: Uni- Structural <i>Bronze</i></b>	I can define the term sustainability									
<b>SOLO SC: Multi- Structural <i>Silver</i></b>	I can classify actions as sustainable and unsustainable									
<b>SOLO SC: Relational <i>Gold</i></b>	I can explain what sustainability is and why it is important									
<b>SOLO SC: Extended Abstract <i>Platinum</i></b>	I can make connection between my learning about unsustainability and what I already know about the human damage caused to biomes around the world									
<b>Activity</b> (What will the children do to demonstrate their understanding of the LI?)	<ul style="list-style-type: none"> <li>- Introduce the knowledge organiser for this topic.</li> <li>- Introduce the key concepts for this unit. How does this unit fit in with our geography journey so far?</li> <li>- What connections can the children make with this content? Encourage discussion. (Natural Resources Y4?)</li> <li>- Work through the Pearson booklet with the class, highlighting key vocabulary, engaging in discussion and answering questions</li> <li>- Then divide the classroom into ‘sustainable’ and ‘unsustainable’ and show chn pictures of plastic bags, reusable coffee cups, recycled cutlery, electric cars, leaving lights on and wasting paper. Chn then decide what is sustainable or unsustainable by moving to each side of the classroom. Cold call children to explain their choices.</li> <li>- Children to work in table groups to think of as many suggestions as possible about how we could live more sustainably.</li> <li>- Children to feedback and share ideas as a class. Children to make a pledge to make a change e.g. turn the tap off while brushing your teeth, not using single use plastic straws, turning electronics off at the wall rather than leaving on stand-by.</li> <li>- Children explain to their partner what change they are going to make. Provide appropriate talk frames.</li> <li>- A display could be created sharing children’s ideas.</li> </ul>									
<b>Key Vocabulary for the lesson</b>	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Sustainability</td> <td style="width: 33%;">Development</td> <td style="width: 33%;">Fossil fuels</td> </tr> <tr> <td>Economy</td> <td>Unsustainable</td> <td>Technology</td> </tr> <tr> <td>Population growth</td> <td>Pressure</td> <td>Tesla</td> </tr> </table>	Sustainability	Development	Fossil fuels	Economy	Unsustainable	Technology	Population growth	Pressure	Tesla
Sustainability	Development	Fossil fuels								
Economy	Unsustainable	Technology								
Population growth	Pressure	Tesla								
<b>Digital Links</b>	Group ideas could be collected on a digital platform									
<b>Curriculum Links</b>	Y4 Geography: Natural Resources									
<b>Resources</b>	<a href="#">Energy and Sustainability</a> <span style="margin-left: 100px;"><a href="#">Pupil Booklet</a></span>									

[Lesson Plan](#)

[Pupil Booklet \(ANSWERS\)](#)

## Lesson 2

**Pearson Lesson**

Are fossil fuels sustainable?

**Learning Intention**

to discuss the advantages and disadvantages of using fossil fuels for energy

**SOLO SC: Uni- Structural *Bronze***

I can identify a type of fossil fuel

**SOLO SC: Multi- Structural *Silver***

I can classify energy sources as renewable and non-renewable

**SOLO SC: Relational *Gold***

I can discuss the advantages and disadvantages of using fossil fuels for energy

**SOLO SC: Extended Abstract *Platinum***

I can research how coal, oil and gas are fueling global conflicts

**Activity**

(What will the children do to demonstrate their understanding of the LI?)

- Retrieval Quiz
- Work through the Pearson booklet with the class, highlighting key vocabulary, engaging in discussion and answering questions
- What do children already know about fossil fuels? What connections can the children make with this content? Encourage discussion. (Natural Resources Y4?) <https://www.youtube.com/watch?v=jGds7edakbk>
- Work through the Pearson booklet with the class, highlighting key vocabulary, engaging in discussion and answering questions
- Children to respond to the question: why are fossil fuels considered a controversial energy source?

**Key Vocabulary for the lesson**

Natural resources  
Renewable  
Non-renewable

Fossil Fuels  
Biomass  
Geothermal

Hydropower  
Nuclear energy  
Solar

**Digital Links**

Google Forms for retrieval quiz  
Digital map / atlas

**Curriculum Links**

Y4 Geography: Natural Resources

**Resources**

[Energy and Sustainability](#)  
[Lesson Plan](#)

[Pupil Booklet](#)  
[Pupil Booklet \(ANSWERS\)](#)

### Lesson 3

<b>Pearson Lesson</b>	What are renewable sources of energy?		
<b>Learning Intention</b>	To research and compare different renewable sources of energy		
<b>SOLO SC: Uni- Structural <i>Bronze</i></b>	I can define the term 'renewable energy'		
<b>SOLO SC: Multi- Structural <i>Silver</i></b>	I can classify energy sources as renewable or nonrenewable		
<b>SOLO SC: Relational <i>Gold</i></b>	I can research and compare different renewable sources of energy		
<b>SOLO SC: Extended Abstract <i>Platinum</i></b>			
<b>Activity</b> (What will the children do to demonstrate their understanding of the LI?)	<ul style="list-style-type: none"> <li>- Retrieval Quiz</li> <li>- Work through the Pearson booklet with the class, highlighting key vocabulary, engaging in discussion and answering questions</li> <li>- Children to have complete their own bar chart and answer the questions</li> <li>- Split the class into 5 groups: Biomass energy, Hydropower energy, Wind energy, Solar energy, Geothermal energy.</li> <li>- Children to research their allocated form of renewable energy: what is it? What countries use it? What are the advantages and disadvantages of these energy sources?</li> <li>- Children to feedback and share ideas with the class. Contributions to be shared in a shared document, creating a collection of information about renewable energy sources.</li> <li>-Plenary : which renewable energy sources are most accessible to the UK? Justify your answer.</li> </ul>		
<b>Key Vocabulary for the lesson</b>	Natural resources Renewable Non-renewable	Fossil Fuels Biomass Geothermal	Hydropower Solar Wind
<b>Digital Links</b>	Research and presentation could be digital. Collaborative document showcasing research from the whole class		
<b>Curriculum Links</b>	Y4 Geography: Natural Resources		
<b>Resources</b>	<a href="#">Energy and Sustainability Lesson Plan</a> <a href="#">Pupil Booklet</a> <a href="#">Pupil Booklet (ANSWERS)</a>		

## Lesson 4

<b>Pearson Lesson</b>	What can we learn from Curitiba?
<b>Learning Intention</b>	To compare sustainability in Curitiba and West Drayton
<b>SOLO SC: Uni- Structural <i>Bronze</i></b>	I can identify ways people in Curitiba live sustainably
<b>SOLO SC: Multi- Structural <i>Silver</i></b>	I can describe the impact of sustainable initiatives in Curitiba
<b>SOLO SC: Relational <i>Gold</i></b>	I can compare sustainability in Curitiba and West Drayton
<b>SOLO SC: Extended Abstract <i>Platinum</i></b>	I can reflect on how sustainability can have a lasting and positive impact on the world
<b>Activity</b> (What will the children do to demonstrate their understanding of the LI?)	<ul style="list-style-type: none"> <li>- Retrieval Quiz</li> <li>- Work through the Pearson booklet with the class, highlighting key vocabulary, engaging in discussion and answering questions</li> <li>- Mapwork: using appropriate resources: internet, globes, atlases locate Curitiba. Discuss its location in the world, encourage the use of geographical language.</li> <li>- How sustainable is West Drayton? What could be improved? Are there any barriers to this improvement?</li> <li>- In table groups, children to collaborate using a large piece of flipchart paper. 1) Write down everything you know about sustainability in Curitiba. 2) Write down everything you know about sustainability in West Drayton. 3) What are the benefits of sustainable living 4) Are there any drawbacks to sustainable living?</li> <li>- Ask groups to feedback some key ideas and address any misconceptions</li> <li>- Children to answer the question;: Which town is more sustainable, Curitiba or West Drayton?</li> </ul>
<b>Key Vocabulary for the lesson</b>	Sustainability Unsustainable Environment Transport system
<b>Digital Links</b>	Opportunities to explore software appropriate for mapwork Children could respond to the final question using a digital format.
<b>Curriculum Links</b>	

<b>Resources</b>	<a href="#">Energy and Sustainability Lesson Plan</a>	<a href="#">Pupil Booklet</a> <a href="#">Pupil Booklet (ANSWERS)</a>
------------------	---	--

## Lesson 5

<b>Pearson Lesson</b>		
<b>Learning Intention</b>		
<b>SOLO SC: Uni- Structural <i>Bronze</i></b>		
<b>SOLO SC: Multi- Structural <i>Silver</i></b>		
<b>SOLO SC: Relational <i>Gold</i></b>		
<b>SOLO SC: Extended Abstract <i>Platinum</i></b>		
<b>Activity</b> (What will the children do to demonstrate their understanding of the LI?)	<ul style="list-style-type: none"> <li>- Opportunity for a research/project based lesson exploring sustainability            E.g. children could explore the production story of a banana - from farm to plate. This could include farming, distribution, packaging, waste etc.            E.g. Children could explore the future of electric cars in terms of sustainable energy and infrastructure            E.g. Children could explore their carbon footprint / carbon footprint of the school and explore how this could be reduced?</li> </ul> <p>Enquiry: Pick and Mix energy: <a href="https://www.edfenergy.com/sites/default/files/energy_pick_n_mix_activity_ks2.pdf">https://www.edfenergy.com/sites/default/files/energy_pick_n_mix_activity_ks2.pdf</a>            Page 10</p>	
<b>Key Vocabulary for the lesson</b>		
<b>Digital Links</b>		
<b>Curriculum Links</b>		
<b>Resources</b>	<a href="#">Energy and Sustainability Lesson Plan</a>	<a href="#">Pupil Booklet</a> <a href="#">Pupil Booklet (ANSWERS)</a>

## Lesson 6 - ASSESSMENT

<b>Assessment Think! Question</b>	'Humans are not capable of living sustainably'. How much do you agree with this statement?	
<b>Tasks</b>	Class discussion about Think! Question - encourage use of appropriate vocabulary (Collaborative) Think! Question (Independent) Knowledge Quiz (Independent)	
<b>Key Vocabulary for the lesson</b>		
<b>Digital Links</b>	Knowledge Quiz available on Google Forms	
<b>Curriculum Links</b>		
<b>Resources</b>	<a href="#">Energy and Sustainability Think! Question</a>	Knowledge Quiz Knowledge Quiz ANSWERS