



Geography Year 8 – Terms 3 and 4 - Sustainable Living MTP

The aim of this unit is to look at how we use our natural resources for energy, food and water. The issues around providing an increasing global population with adequate access to these resources. The emphasis is on how we can manage these resources in a sustainable way, with opportunities to discuss renewable energy, conservation, recycling, reducing waste and reusing and repurposing unwanted clothing! This Scheme of Work makes reference to the United Nations Sustainable Development Goals. This feeds on from the ‘Globalisation and Me’ unit, as it explores ideas about interconnections between individuals and global communities. It follows on from the previous unit on weather and climate as it looks at how our consumerism can have negative impacts on our environment. This unit feeds forward to the next unit of Africa as it prepares students for the study of communities in Africa.

<u>Give students a copy of the UN 17 sustainable development goals.</u>	<u>Lesson Intent</u> (i.e. how does support learning in the next lesson/future lesson/exam prep, etc.)	<u>Activities/Assessment (to including the metacognitive/learning verb</u>	<u>Vocabulary – Daily Retrieval/Teach for memory</u>	<u>Homework/Literacy Map</u>
Lesson 1: KG – Explain how we use our planet as a natural resource. SDG – 7 Affordable and clean energy.	An overview lesson on how we use our planet as a natural resource. (Hodder KS3 pages 22-23) Feeds on from weather and climate unit. Feeds forward to lessons on how we use our planet as a natural resource. This is expanded on in Lesson 2, where we shall be looking at the four spheres and how we	Students begin by doing a daily retrieval task. Explain what natural resources are. Explain how fossil fuels are a natural resource. Identify the “four spheres”. Complete tasks surrounding the four spheres and their functions. Watch a video about natural resources. Plenary; Students to explain whether their lifestyles and use of natural resources are impacting the world. Marked Work: Earths natural resources. Students are to answer 4 questions related to the four spheres.	DIN: Write down ways in which we use natural resources to make things. Fossil fuels Natural resources Atmosphere Biosphere Hydrosphere Lithosphere	Homework: To be set on a weekly basis. From the vocabulary identified for retrieval in the next lesson. Homework set on the last lesson of the week, using vocab from that lesson in preparation for retrieval in the first lesson of the next week.

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	use natural resources to benefit us collectively.			
Lesson 2: As above	<p>Feeds on from how we use our planet as a natural resource.</p> <p>Feeds forward to what fossil fuels are. Students will be looking at how we use fossil fuels, how we collect them and how they are considered non-renewable forms of energy.</p>	<p>Students begin by doing a daily retrieval task.</p> <p>Watch a video about renewable energy and take notes.</p> <p>Explain wind, solar and hydroelectric power.</p> <p>Students to complete book activities.</p> <p>Extension is to rank the 8 natural resources in the book from best to worst and explain why.</p> <p>Quiz on natural resources to help students retain information longer and to add a little fun and competition in the lesson.</p> <p>Plenary; Is clean energy the future of fuel? Students are to explain why they agree or disagree.</p>	<p>DIN: What are the four spheres of the earth?</p> <p>Wind power</p> <p>Solar power</p>	<p>Daily Retrieval:</p> <p>Fossil fuels</p> <p>Natural resources</p> <p>Atmosphere</p> <p>Biosphere</p> <p>Hydrosphere</p> <p>Lithosphere</p>
Lesson 3: KG Describe what a fossil fuel is.	<p>Energy – what are non-renewable energy sources. Overview of how fossil fuels are made. (Geog. Book)</p> <p>Feeds on from how we use our planet as a natural resource.</p> <p>Feeds on from Lesson 2, where we looked at what non-renewable energy is.</p> <p>Feeds forward to next lesson, when students will be looking at reasons why the world is so dependent of oil resources.</p>	<p>Students begin by doing a daily retrieval task.</p> <p>Explain how oil coal and gas are formed.</p> <p>Explain the effect they are having on the earth.</p> <p>Students are to complete exercises from page 262-63</p> <p>Students create a renewable/non-renewable table and separate one another into the correct box.</p> <p>Show how energy is made from coal.</p>	<p>DIN: Name 3 types of fossil fuels</p> <p>Non-renewable energy</p> <p>Greenhouse effect</p> <p>Deep cast mining</p>	<p>Daily Retrieval:</p> <p>Wind power</p> <p>Solar power</p>
Lesson 4: KG Explain why the	Why is oil so important?	Students begin by doing a daily retrieval task.	DIN: Explain why	Daily Retrieval:

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<p>world is so dependent of oil resources.</p>	<p>What do we use it for? (Hodder pages 34-35) Feeds on from why the world is so dependent of oil resources. This feeds on from lesson 2 (non-renewable), and Lesson 3, where we touch upon fossil fuels and our dependence on them. Feeds forward to the dangers of our reliance on oil.</p>	<p>Explain the importance of oil and what a single barrel can power. Students to watch the video on whether fossil fuels like oil will run out. Students create a pros and cons table and add the correct terminology and meanings into the correct area. Students to do page 34-35 Hodder KS3 exercise book. Truth of false quiz. Plenary; is oil good or bad, explain your answer.</p>	<p>you believe oil is important. Carbon Dioxide Dependant Global demand</p>	<p>Non-renewable energy Greenhouse effect Deep cast mining</p>
<p>Lesson 5: KG Explain the dangers of our reliance on oil.</p>	<p>Case study of an environmental disaster using a fossil fuel. (Exon Valdez? There are many to choose from.) Feeds on from the dangers of our reliance on oil. Feeds forward to how we can generate renewable energy.</p>	<p>Students begin by doing a daily retrieval task. Explain to students our reliance on oil and how we are moving towards things like fracking to get more oil. Students are to copy down the definition for fracking. Students will write down a few questions related to a video. The class will then watch the video and write their answers down. This is to promote independent learning. Students are to complete a case study on Blackpool's fracking situation. Students will then write a letter to the prime minister about "claims" (fiction) Rye will be a fracking site. They are to express their opinions on the matter. Plenary; students vote on whether our reliance on oil is getting too dangerous and then will write their answer down.</p>	<p>Fracking</p>	<p>Daily Retrieval: Carbon Dioxide Dependant Global demand</p>
<p>Lesson 6: Explain how we can generate renewable energy.</p>	<p>Overview of renewable energy. What are the alternatives to fossil fuels. Then a case study</p>	<p>Students begin by doing a daily retrieval task. Students will look at the pros and cons of renewable energies such as solar power. Students are to complete a case study on Kent wind</p>	<p>DIN: Guess the type of energies. Replenish</p>	<p>Daily Retrieval: Fracking</p>

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	<p>of one in particular. (Geog. Have a case study of a wind farm. Feeds on from how can generate renewable energy. Feeds forward to how we can generate renewable energy. It also studies the advantages and disadvantages of renewable energy.</p>	<p>farms. They will then complete a hand-out on renewable energies. Students to watch a video on renewable energy and take down notes. Students are to answer the following; "Evaluate what type of energy you think is the most sustainable." Students must explain their given examples. Marked work: Students are to answer a question on whether hydroelectric power is the most reliable form of renewable energy.</p>	<p>Harness Sustainable</p>	
Lesson 7: KG – As above	<p>Follows from how we can generate renewable energy. This feeds forward to identifying different terms surrounding natural resources such as sustainability and why it is an important thing to consider this. This also feeds to reasons why scientists use natural resources such as oil to synthetically create new items, of which in turn can create clothes as an example, but also plastic.</p>	<p>Students begin by doing a daily retrieval task. Students are to work in groups and create a presentation on a renewable energy of their choice. Their next task they must again work in groups. They are tasked as working for the government. Each group is competing to get their renewable energy plans through to become law. They must write a page worth speech collectively. Winners determined by vote. This lesson is to incorporate group work, the sharing of ideas whilst at the same time having the students learn about renewable energy. This is a good lesson for students to recall important points about renewable energy.</p>	<p>DIN: Write down 3 types of renewable energy and then give a pro and con for all 3.</p> <p>Renewable</p>	<p>Daily Retrieval: Replenish Harness Sustainable</p>
Lesson 8: KG Explain how we	Investigate how we can	Students begin by doing a daily retrieval task.	DIN: Write down 3	Daily Retrieval:

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<p>can use natural resources sustainably.</p>	<p>use energy sustainably as individuals, at home/school. Locally, Nationally and Internationally. (Hodder pages 38-39) Feeds on from how we can generate renewable energy. Feeds forward to how we justify the use of nuclear energy. It touches upon the advantages and disadvantages of nuclear energy, and whether it is the most reliable source of energy, in comparison to renewable forms of energy.</p>	<p>Students will look at the difference between finite and renewable energies. Explain the concept of sustainability, from a local, national and international perspective. Students are to take down notes from the video. Students to answer short questions in relation to the use of Earth's resources from a finite point of view. Students to complete p.39 Hodder KS3. Extension is to create a poster detailing the benefits of sustainable renewable energy. Plenary question; Is it possible for us to successfully use sustainable energy in a form that does not damage the planet?</p>	<p>forms of natural resources that we can use.</p> <p>Sustainability Finite Synthetic Supplement</p>	<p>Renewable</p>
<p>Lesson 9: KG Justify the use of nuclear power.</p>	<p>What is nuclear power? Is it a sustainable alternative to fossil-fuels. (possibly look at Chernobyl or Fukushima – there is a lesson on this in the 2018 – 2019 yr 8 energy folder) Feeds on from how we can use natural resources sustainably. Feeds forward to water</p>	<p>Students begin by doing a daily retrieval task. Explain what nuclear energy is and why it is a non-renewable form of energy. Students to copy down questions to answer whilst watching a video on nuclear energy. Extension is to answer whether they believe nuclear energy is helpful or dangerous and damaging to the world. Students to copy down notes from the next video on the pros and cons of nuclear energy. Students to complete a task in which they shade various boxes into two categories; in favour and against. This will</p>	<p>DIN: What is the meaning behind this cartoon?</p> <p>Nuclear energy Converted In favour</p>	<p>Daily Retrieval: Sustainability Finite Synthetic Supplement</p>

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	and how we use it. It reflects on usage per families, and also where in the country rain falls the most and least.	allow students to do independent learning and to form a stronger opinion on nuclear energy. Plenary; class poll to assess views about nuclear energy.		
Lesson 10: KG Describe how we use water in the UK. SDG – 6 Clean water and sanitation.	Examine how we use water in our homes. Look at areas of deficit and surplus in the UK. (Oxford – 128 – 129). Continues to look into water usage and the importance of water management in future decades to come. It also looks into how water quality differs depending on what part of the country you are in. Feeds on from the use of nuclear power.	Students begin by doing a daily retrieval task. Explain water facts related to England and Wales. Students are to use a map and to answer questions on the Powerpoint about rain. Students are to watch a video and take down notes on water management. Explain to the students the presented government report on water quality and pollution in England. Students are to complete questions from pp.127-128 from KS3 Oxford Geo book.	DIN: How much water do you believe the average household uses a day? Average Water management	Daily Retrieval: Nuclear energy Converted In favour

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