



Y11 Science– Chemistry of the Atmosphere – Spring Term - Knowledge Overview

Year group:		Unit:		Date (from and to):	
Week beginning:	Big question / concept:	Learning intentions:	Resources		
			Offline:	Online including links on how to access these:	
			Y11 Chemistry Offline Booklet		
4 and 11 th January 2021	How has our atmosphere evolved?	<p>Identify the different gases which make up the earth's atmosphere</p> <p>State the percentage of gases that make up the earth's atmosphere</p> <p>Describe changes in the earth's atmosphere over time.</p>	<p>Read and make notes from slides 2-3</p> <p>Answer the exam questions on slides 4-6</p> <p>Mark your answers using slides 7-8</p>	<p>Oak National Academy the Earth's Atmosphere</p> <p>https://classroom.thenational.academy/lessons/the-earths-atmosphere-74wk2e</p> <p>Make notes from the GCSEPOD video</p> <p>https://members.gcsepod.com/shared/podcasts/title/10875/66751</p>	
	How has our atmosphere evolved?	<p>State the factors that composed the earths early atmosphere</p> <p>Explain the role of volcanoes in the earths early atmosphere</p> <p>Explain the role of the ocean in the earth's early atmosphere</p>	<p>Read and make notes from slides 9-10</p> <p>Answer the exam questions on slides 11-13</p> <p>Mark your answers using slides 14-15</p>	<p>Make notes from the GCSEPOD videos</p> <p>https://members.gcsepod.com/shared/podcasts/title/10876/66744</p> <p>Complete the exam questions on the earths early atmosphere</p> <p>https://wyxiaos.exampro.net/</p>	

<p>18th and 25th of January 2021</p>	<p>How have the proportions of carbon dioxide and oxygen changed?</p>	<p>State the changes of levels of carbon dioxide and oxygen.</p> <p>Explain the role of algae in the changes in the atmosphere</p> <p>Apply knowledge of photosynthesis and the impact this has had on the earth's atmosphere</p>	<p>Read and make notes from slides 16-18</p> <p>Answer the exam questions on slides 19-23</p> <p>Mark your answers using slides 24-27</p>	<p>Oak National Academy Photosynthesis</p> <p>https://classroom.thenational.academy/lessons/photosynthesis-cnj36r</p> <p>Make notes from the GCSEPOD videos</p> <p>https://members.gcsepod.com/shared/podcasts/title/10877/66738</p>
	<p>What are humans doing to our planet?</p>	<p>Identify three different greenhouse gases</p> <p>Explain how wavelength impacts whether a gas can penetrate the greenhouse gas layer in the atmosphere</p> <p>Explain how visible light is re-radiated</p> <p>Identify human activities that contribute to greenhouse gases in the atmosphere</p> <p>Explain why many scientists believe that the temperature of earth's atmosphere will increase.</p>	<p>Read and make notes from slides 28-31</p> <p>Answer the exam questions on slides 32-34</p> <p>Mark your answers using slides 35-36</p>	<p>Oak National Academy the Greenhouse Effect</p> <p>https://classroom.thenational.academy/lessons/the-greenhouse-effect-6gup6r</p> <p>Oak National Academy Global Warming</p> <p>https://classroom.thenational.academy/lessons/global-warming-6ww64c</p> <p>Watch the following videos and make notes from GCSEPOD</p> <ul style="list-style-type: none"> - Global Pollution - Deforestation <p>https://members.gcsepod.com/shared/podcasts/title/10795/66168</p>

<p>1st February 2021</p>	<p>What are humans doing to our planet?</p>	<p>Identify what is meant by carbon footprint</p> <p>Identify what is meant by global dimming</p> <p>Explain what climate change is</p> <p>Explain the effects of climate change</p>	<p>Read and make notes from slides 37-38</p> <p>Answer the exam questions on slides 39-43</p> <p>Mark your answers using slides 44-45</p>	<p>Oak National Academy Climate Change</p> <p>https://classroom.thenational.academy/lessons/climate-change-6qu6ce</p> <p>Oak National Academy Human Causes of Climate Change</p> <p>https://classroom.thenational.academy/lessons/human-causes-of-climate-change-68vkar</p> <p>Watch and make notes from The Greenhouse Effect video on GCSEPOD</p> <p>https://members.gcsepod.com/shared/podcasts/title/10795/66168</p>
<p>8th February 2021</p>	<p>What are humans doing to our planet?</p>	<p>State the two types of combustion</p> <p>Explain the effects on complete and incomplete combustion on the earth's atmosphere</p> <p>Explain the role of combustion in climate change</p>	<p>Read and make notes from slides 46-49</p> <p>Answer the exam questions on slides 50-53</p> <p>Mark your answers using slides 54-55</p>	<p>Oak National Academy Pollutants</p> <p>https://classroom.thenational.academy/lessons/pollutants-6rukcc</p>