

Knowledge Organiser – GCSE (KS4) Chemistry of the Atmosphere

Year group:	Unit:	Date (from and to):		
Week beginning:	Big question / concept:	Learning intentions:	Resources	
			Offline: Y11 Chemistry Offline Booklet	Online including links on how to access these:
4 th January 2021 Lesson 1	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>
4 th January 2021 Lesson 2 and 3	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>4th January 2021</p> <p>Lesson 4</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-cn36r</p> <p>Make notes from the GCSEPOD videos</p> <p>https://members.gcsepod.com/shared/podcasts/title/10877/66738</p>
<p>4th January 2021</p> <p>Lesson 5 and 6</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 32-35</p> <p>Mark your answers using slides 36-37</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>11th January 2021</p> <p>Lesson 7</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 38-39</p> <p>Answer the exam questions on slides 40-44</p> <p>Mark your answers using slides 44-46</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>11th January 2021</p> <p>Lesson 8</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 47-50</p> <p>Answer the exam questions on slides 51-54</p> <p>Mark your answers using slides 55-56</p>	<p>Oak National Academy Pollutants</p> <p>https://classroom.thenational.academy/lessons/pollutants-6rukcc</p>