



Learning Journey – 8H The Earth and its Atmosphere

Ad Astra

What have I done previously in my learning journey?										
Previously....	In primary school you should have looked at how we can do things to protect the planet. You will also have looked at resources form the Earth in Geography.									
In this topic...	In this topic you will explore what resources we get from the planet and how human activity is affecting the environment. <ul style="list-style-type: none">• What is the structure of the Earth?• What different types of rocks are found on Earth?• How is carbon cycled on the planet?• What causes global warming?• How can human actions impact on the planet?• How can humans reduce their impact on the planet?									
We will develop our learning by studying the following each lesson:								RAG	Skills in Science checklist	
8H.01 The Earth and Its Atmosphere <ul style="list-style-type: none">• Identify the key parts of the Earth’s structure: core, mantle, crust, atmosphere• Describe the composition of each part of the earth• Explain how composition of earth and its atmosphere gives rise to characteristics of the earth									<input type="checkbox"/> Scientific Methods <input type="checkbox"/> Practical <input type="checkbox"/> Number Skills <input type="checkbox"/> Application <input type="checkbox"/> Communication	
8H.02 The Rock Cycle <ul style="list-style-type: none">• Name and give examples of the different rock types.• List the processes that convert sedimentary, igneous and metamorphic rocks.• Construct a labelled diagram to explain the processes of rock formation.• Use models to explain the formation of the different types of rock.									<input type="checkbox"/> Scientific Methods <input type="checkbox"/> Practical <input type="checkbox"/> Number Skills <input type="checkbox"/> Application <input type="checkbox"/> Communication	
8H.03 The Carbon Cycle <ul style="list-style-type: none">• State that carbon is present in different forms on Earth and its atmosphere• Name molecules that contain carbon on the earth and its atmosphere• Describe ways that carbon moves between organisms and parts of the earth• Apply to exam style questions									<input type="checkbox"/> Scientific Methods <input type="checkbox"/> Practical <input type="checkbox"/> Number Skills <input type="checkbox"/> Application <input type="checkbox"/> Communication	
8H.04 Global Warming <ul style="list-style-type: none">• Define the terms greenhouse effect and global warming.• Describe how greenhouse gases cause the earth to get warmer• Explain why increasing temperatures can have negative consequences for the environment• Apply to exam style questions									<input type="checkbox"/> Scientific Methods <input type="checkbox"/> Practical <input type="checkbox"/> Number Skills <input type="checkbox"/> Application <input type="checkbox"/> Communication	
8H.05 Human Activities 1 <ul style="list-style-type: none">• List human activities that impact on the climate by producing carbon dioxide• Describe how deforestation, agriculture, and waste production all contribute to the amount of greenhouse gases• Suggest ways that the level of carbon dioxide in the atmosphere can be reduced									<input type="checkbox"/> Scientific Methods <input type="checkbox"/> Practical <input type="checkbox"/> Number Skills <input type="checkbox"/> Application <input type="checkbox"/> Communication	
8H.06 Human Activities 2 <ul style="list-style-type: none">• Describe what is meant by peer-review and bias• Consider opinions that agree/disagree with the human impact on global warming.• Suggest ways that the level of carbon dioxide in the atmosphere can be reduced									<input type="checkbox"/> Scientific Methods <input type="checkbox"/> Practical <input type="checkbox"/> Number Skills <input type="checkbox"/> Application <input type="checkbox"/> Communication	
8H.07 Using resources <ul style="list-style-type: none">• Name some resources that humans use from the Earth• Describe what it means that the earth's resources are limited• Suggest methods to extend the time left before various resources from the earth run out• Apply your understanding of resources to different people around the world.									<input type="checkbox"/> Scientific Methods <input type="checkbox"/> Practical <input type="checkbox"/> Number Skills <input type="checkbox"/> Application <input type="checkbox"/> Communication	
8H.08 Recycling <ul style="list-style-type: none">• Recall methods of extending the time left before resources run out• Discuss the efficacy of recycling• Evaluate the benefits of using renewable energy resource instead of non-renewable energy resources									<input type="checkbox"/> Scientific Methods <input type="checkbox"/> Practical <input type="checkbox"/> Number Skills <input type="checkbox"/> Application <input type="checkbox"/> Communication	
Key Vocabulary										
Crust	Mantle	Core	Atmosphere	Sedimentary	Igneous	Metamorphic	Sedimentary	Respration		
Photosynthesis	Greenhouse effect	Global warming	Deforestation	Renewable	Finite	Recycling	Carbon dioxide			



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Future Learning	In year 11 you will study topics in Chemistry and Biology about the resources that come from the earth and how humans are impacting on the planet.
In careers	Understanding what resources come from the Earth is really important so we can make informed decisions about how we live our life to ensure we are not having a negative impact on the planet. In your lifetime some of the Earth's resources will run out so there will be many jobs in all sorts of industries looking at ways to be more environmentally friendly.