

Year 13 – September - December

What are we learning?	What knowledge, understanding and skills will we gain?	What does mastery look like?	How does this build on prior learning?	What additional resources are available?
NEA	<p>Knowledge:</p> <p>Before we go:</p> <ul style="list-style-type: none"> • Stages of a geographical investigation • What makes a good Hypothesis • Sampling techniques • Different types of data • Statistical test summaries/recap • How to analyse data <p>On pre study:</p> <ul style="list-style-type: none"> • Human and physical data collection techniques • Background information about study area – Southwold • Chosen mini study <p>Understanding:</p> <ul style="list-style-type: none"> • Students will gain a deeper understanding into the chosen area of course on which they base their independent study <p>Skills:</p> <ul style="list-style-type: none"> • Independent work • Statistical testing • Data collection • Analysis • Conclusion • Evaluation • Assessing risks 	<p>A comprehensive study which is linked to the hypothesis that the student has set</p> <p>This will include:</p> <ul style="list-style-type: none"> • Data collection and the ability to select an appropriate amount and type of data to collect • High level graphical display of this data using a varied number of techniques • Clear and concise analysis of the data which they collected • A detailed conclusion linked to the hypothesis and key questions set by the student • An overall evaluation of their study 	<p>The NEA will differ from student to student and is based on their chosen area of the course studied. This can be based on any of the topics studied in Year 12.</p>	<p>Text books</p> <p>OCR A level course book UEA library</p> <p>Other</p> <p>Mark scheme (exam board) How to reference Which stats test should I use? – Flow diagram Independent investigation – Student guide (exam board) Guide to completing titles and the proposal form (exam board) A level investigation – Student guide (FSC)</p>

Year 13 - Unit 4 – January to April

What are we learning?	What knowledge, understanding and skills will we gain?	What does mastery look like?	How does this build on prior learning?	What additional resources are available?
<p>Earth Life Support Systems</p>	<p>Knowledge:</p> <ol style="list-style-type: none"> How important are water and carbon to life on Earth? <ul style="list-style-type: none"> Water and carbon support life on Earth and move between the land, oceans and atmosphere. The carbon and water cycles are systems with inputs, outputs and stores. The carbon and water cycles have distinctive processes and pathways that operate within them. How do the water and carbon cycles operate in contrasting locations? <ul style="list-style-type: none"> It is possible to identify the physical and human factors that affect the water and carbon cycles in a tropical rainforest. It is possible to identify the physical and human factors that affect the water and carbon cycles in an Arctic tundra area. How much change occurs over time in the water and carbon cycles? <ul style="list-style-type: none"> Human factors can disturb and enhance the natural processes and stores in the water and carbon cycles. The pathways and processes which control the cycling of water and carbon vary over time. To what extent are the water and carbon cycles linked? <ul style="list-style-type: none"> The two cycles are linked and interdependent. The global implications of water and carbon management. 	<p>Being able to explain in detail the process and stores that occur within the carbon and water cycle. They will be able to explain the role that both cycles have on the Earth.</p> <p>Explain in detail the impacts humans have had on the processes and stores of the carbon and water cycle as well as how they have naturally changed over time.</p> <p>They will be able to explain how the carbon and water cycle are interdependent and how changes in one can impact the other.</p> <p>They will be able to compare factors of the carbon and water cycle in the Amazon rainforest to factors of both cycles in the Arctic. They will be able to do this using case study specific detail. They will have examples of both cycles, how they are being affected and how these impacts are being mitigated.</p>	<p>GCSE at Notley – Sustaining Ecosystems – human impacts on rainforests and arctic tundra</p> <p>All GCSEs study climate change in some form and this links to the carbon cycle.</p>	<p>Text books OCR A level geography Geography an integrated approach</p> <p>Articles In lesson -</p> <ul style="list-style-type: none"> Deforestation and rainfall in Amazon basin Barak Obama bans drilling Exxon Valdez oil spill Oil and gas in US arctic Shell abandons Alaska drilling <p>Additional Reading</p> <ul style="list-style-type: none"> Amazon deforestation Desalination and water security Feedback systems Fracking in North Dakota Giant icebergs and the carbon cycle Global carbon budget Peat bogs Sediments in landscapes

Understanding:

- Water and carbon are cycled between the land, oceans and atmosphere in open and closed systems and these are inter-related.
- Forests, soils, oceans and the atmosphere all store carbon and yet they are threatened and altered by human activity.
- Physical changes in these cycles occur over time and these changes can be seen at a range of scales.
- The need for global and national solutions to protect 'Earth's life support systems'.

Skills:

- Climate graphs
- Simple mass balance
- Rates of flow
- Analysis and presentation data.

- Water security in Western Australia
- Water stewardship

Other

Zig-zag exam Q's

GCSE Pods

OCR A level geography work book

Recommended revision guide:

OCR A Level Geography Student Guide 2: Earth's Life Support Systems; Global Connections

By Peter Stiff and David Barker