Unit 4 Biogeochemical Cycles SEV2

(Three weeks total) Nov. 4 – 20 / Apr. 12 - 30

***Obtain, evaluate, and communicate information to construct explanations of stability and change in Earth’s ecosystems***.

a. Analyze and interpret data related to short‐term and long‐term natural cyclic fluctuations associated with climate change.

**Learning Goals:**

1. I can identify data models that demonstrate short-term and long-term natural cyclic fluctuations in ecosystems.
2. I can identify data models that demonstration climate change in ecosystems.
3. I can use data models to determine the relationship between short-term and long-term natural cyclic fluctuations and climate change.
4. I can analyze and interpret data related to short-term and long-term natural cyclic fluctuations associated with climate change.



Activities:

Vocabulary:

<https://docs.google.com/document/d/1oIJ4FadpXsvns-Ml9IwnWU-lkn3N2Iq0dvNlg5A68lc/edit>

**PowerPoint Presentation:**

<https://drive.google.com/drive/folders/1_YLYrdIOTtBIhiZWeMcTfYZn-nKbfTic>

Laboratory session:

**Solution to Climate Changes**: Part A: <https://docs.google.com/document/d/1PFjAZehIRWwFbUcdJ0yzTkAH1QIJk1xbuj5t8OoHW-w/edit>

Part B Cards:

<https://docs.google.com/document/d/1LGc-FnOiQsBYKWklMx7d4NrlYaJ5Pt0SUyUoPD2Z6ws/edit>

Part C Problem Cards:

<https://docs.google.com/document/d/137OmZe1OXAeEYK2jYuiWi_QTXM6TH9xnyeBG2id2JOo/edit>

***Reading Ecological Footprint*** *:Formative Assessment : Nov.6 / Apr.13*

<https://drive.google.com/drive/folders/1aswIhRlufN0Blpi0bw8OAutC9_XISav0>

***Climate Refugees:***

[file:///C:/Users/diana.moore/Downloads/Climate%20Refugees%20(1).pdf](file:///C:\Users\diana.moore\Downloads\Climate%20Refugees%20(1).pdf)



b. Analyze and interpret data to determine how changes in atmospheric chemistry (carbon dioxide and methane) impact the greenhouse effect.

**Learning Goals:**

1. I can describe the greenhouse effect.
2. I can identify factors that cause changes in atmospheric carbon dioxide and chemistry.
3. I can identify data models that represent changes in atmospheric chemistry (carbon dioxide and methane).
4. I can identify data models that represent the greenhouse effect.
5. I can analyze and interpret data to determine the relationship between changes in atmospheric chemistry and the greenhouse effect.

**Activities:**

PowerPoint Presentations: Formative Assessment: Nov. 13 / Apr. 16

<https://drive.google.com/drive/folders/1_YLYrdIOTtBIhiZWeMcTfYZn-nKbfTic>

Videos:

Climate Change:

<https://www.youtube.com/watch?v=rpVnNWMLgQw>

Greenhouse Effect:

<https://www.youtube.com/watch?v=3ojaDMadZXU>

Atmospheric Chemistry:

<https://www.youtube.com/watch?v=6LkmD6B2ncs>

Atmosphere Webquest:

<https://www.astephensscience.com/uploads/4/0/7/3/40734789/atmospher-webquest-handout.pdf>

Summative Assessment: Nov. 18 / Apr. 29



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