SC21 Earth and Atmospheric Science

Topic Progression Checklist

I know this → colour green	I'm not sure → colour yellow	I don't know this → colour red

Subtopics and Learning Objectives	Start	End
SC21a The Early Atmosphere		
Describe how the Earth's early atmosphere was formed.		
State the names and relative amounts of the gases found in the Earth's early atmosphere.		
Draw conclusions from evidence about the Earth's early atmosphere.		
Explain how the oceans are thought to have formed.		
SC21b The Changing Atmosphere		
Describe how the formation of the oceans influenced the composition of the atmosphere.		
Explain how photosynthetic organisms (including plants) changed the composition of the atmosphere.		
State the chemical test for oxygen.		
SC21c The Atmosphere Today		
Recall the names of significant greenhouse gases.		
Describe the processes involved in the greenhouse effect.		
Describe how human activity increases the concentration of greenhouse gases.		
Evaluate the correlation between atmospheric carbon dioxide concentrations and fossil fuel use.		
Evaluate the evidence for increased atmospheric greenhouse gas concentrations being part of the cause of global warming and climate change.		
SC21d Climate Change		
Suggest possible effects on the climate of increased levels of carbon dioxide and methane.		
Describe how human activity leads to increased carbon dioxide levels.		
Describe how human activity leads to increased methane levels.		
Describe the projected effects of climate change.		
Describe how the potential harmful effects of climate change can be addressed and limited.		