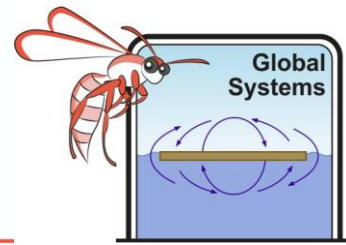


The Enhanced Greenhouse Effect – Student Activity



We need accurate data to scientifically measure changes in the forcing factors that are responsible for the Enhanced Greenhouse Effect (Global Warming). Two government bodies, the Bureau of Meteorology (BoM) and CSIRO have been collecting data that has been used to produce the State of the Climate 2014 report.



1. What is the area of responsibility of the Bureau of Meteorology? _____

2. Is this a world-renowned group of independent scientific experts? _____

3. What do the letters CSIRO refer to and what is the purpose of this organisation? _____

4. Is this a world-renowned group of independent scientific experts? _____

5. What is an isotope and what are the three most common isotopes of carbon? _____

View: <http://www.bom.gov.au/state-of-the-climate/>

6. What did the scientists want to do? _____

7. From how many stations is data being collected? _____

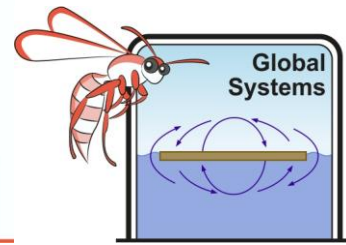
8. Is this primary data, secondary data or proxy data? Explain your answer. _____

9. How has measurement changed since 1970? _____

10. How can the scientists tell if carbon dioxide comes from the burning of fossil fuels?

11. What are the three sources of atmospheric carbon dioxide? _____

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12. What is the conclusion developed from this research? _____

13. What two factors were compared in the graph at the end of the film clip? _____

14. Which of these two possible forcing factors demonstrated the greatest increase since 1840? _____

15. Why did the graph not extend before 1840? _____

Bring it all together

Using the information you have collected, write a brief report on these findings by BoM and CSIRO scientists. You will be constructing a report based on evidence-based arguments. It will need a title, catchy introductory sentence and three paragraphs of information that should convince the reader the findings are meaningful.

Marks allocated

- | | |
|--|-----------|
| 1. Title and author | (2 marks) |
| 2. Introductory sentence which explains what will follow | (2 marks) |
| 3. Key words | (5 marks) |
| 4. Brevity | (1 mark) |
| 5. Three paragraphs covering three concepts | (3 marks) |

