

Course Work Activity 2 - Climate Change

Work must be titled 'Coursework 2 - Climate Change'. Answer the questions in full and make sure that your explanation is thorough. Be sure to show all your work (calculations); a single numerical answer is not acceptable.

Aim: to explore the concepts of the atmospheric greenhouse effect and global warming.

1. Find an image from the web or a book (not shown in the slides) showing the processes occurring during the atmospheric greenhouse effect (the image must not include the words trapped or blanket).

Describe the atmospheric greenhouse effect using the terms VISIBLE, INFRARED, ABSORB(ED), and EMIT(TED).
2. Describe why the atmospheric greenhouse effect gases absorb and emit radiation whilst other atmospheric gases do not.
3. Draw your own version of the Keeling curve using the instructions provided in the exercise CO₂-graph.pdf.
4. The current CO₂ concentration is 380 ppm or 0.038 %. What is the connection between ppm and %?
5. Find an image from the web or a book (not shown in the slides) showing the 'Hockey Stick graph'. Give a brief description of how the graph was constructed.