**Stage 2 Chemistry – Assessment Type 2 SAT task**

Your task is to create an infographic that will demonstrate your knowledge of the chemistry and associated issues involved with increased carbon emissions. The science understanding that must be evident in your work comes from subtopics 1.1 and 4.1.

You will present your infographic as an A2 (2x A3) size poster (up to 750 words) and give a 5 minute oral presentation to the class, as if you were teaching your topic. You will then answer questions from the audience.

Your finished work should link at least three of the following concepts to carbon emissions:

* greenhouse effect
* climate change
* ocean acidification
* photosynthesis
* combustion of fuels
* renewable and non-renewable energy sources

There should also be an explanation of an example of how a new technology has improved the efficiency of a process that emits or captures CO2. You will need to explain how this example illustrates one of the key concepts of science as a human endeavour.

You can use the infographic at <http://www.compoundchem.com/wp-content/uploads/2017/01/Carbon-Dioxide-and-Ocean-Acidification.png>

as an example of how to set out your work. Make sure that you present information at a Stage 2 Chemistry level by addressing the required specific features.

Acknowledge your sources of information appropriately and submit as a separate document.

**Assessment Conditions**

You will have 2 weeks of your own time to prepare this task. A draft of the material you will present is due after 1 week.

Draft due date: Monday Week 5

Presentation due date: Monday Week 6

The specific features assessed are:

KA1 Demonstration of knowledge and understanding of chemical concepts.

KA3 Exploration and understanding of the interaction between science and society.

KA4 Communication of knowledge and understanding of chemical concepts and information, using appropriate terms, conventions, and representations.

|  | Knowledge and Application |
| --- | --- |
| **A** | Demonstrates deep and broad knowledge and understanding of a range of chemical concepts.  Critically explores and understands in depth the interaction between science and society.  Communicates knowledge and understanding of chemistry coherently, with highly effective use of appropriate terms, conventions, and representations. |
| **B** | Demonstrates some depth and breadth of knowledge and understanding of a range of chemical concepts.  Logically explores and understands in some depth the interaction between science and society.  Communicates knowledge and understanding of chemistry mostly coherently, with effective use of appropriate terms, conventions, and representations. |
| **C** | Demonstrates knowledge and understanding of a general range of chemical concepts.  Explores and understands aspects of the interaction between science and society.  Communicates knowledge and understanding of chemistry generally effectively, using some appropriate terms, conventions, and representations. |
| **D** | Demonstrates some basic knowledge and partial understanding of chemical concepts.  Partially explores and recognises aspects of the interaction between science and society.  Communicates basic chemical information, using some appropriate terms, conventions, and/or representations. |
| **E** | Demonstrates limited recognition and awareness of chemical concepts.  Attempts to explore and identify an aspect of the interaction between science and society.  Attempts to communicate information about chemistry. |