# Global warming

Global warming – how can we cool it?

# SAILS inquiry and assessment unit overview

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| **Name** | Global warming |
| **Key content/concepts** | * Greenhouse effect * Carbon cycle * Global warming |
| **Level** | * Lower second level * Upper second level |
| **Inquiry skills assessed** | * Forming coherent arguments * Working collaboratively |
| **Assessment of scientific reasoning and scientific literacy** | * Scientific reasoning (argumentation; making comparisons) * Scientific literacy (analysis and interpretation of scientific data; using scientific data) |
| **Assessment methods** | * Classroom dialogue * Teacher observation * Peer-assessment * Self-assessment * Worksheets * Student devised materials (written arguments) * Presentations |

Table 1: Assessment of skill of using scientific information, Activity A: Interpreting the evidence

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| --- | --- | --- | --- |
| **Skill assessed** | **Level 1** | **Level 2** | **Level 3** |
| **Using scientific information** | Makes reference to both graphs (as a whole). | Makes reference to both graphs (as a whole and in detail). | Makes reference to both graphs (as a whole and in detail). |
| Presents supportive arguments for at least of one of the student’s conclusions. | Presents supportive arguments for both of the student’s conclusions. | Presents several supportive arguments for both of the student’s conclusions. |
| Attempts to provide scientifically reasonable justifications for arguments. | Provides scientifically reasonable justifications for arguments. | Provides scientifically valid justifications for arguments. |

Table 2: Assessment of skills considered in Activity B: Forming scientific arguments

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| **Skill assessed** | **Level 1** | **Level 2** | **Level 3** |
| **Analysing arguments** | Identifies any of Perry’s arguments. | Justifies whether a selected argument made by Perry is based on opinions and/or scientific facts. | Identifies whether Perry’s arguments are based on opinions and/or scientific facts. |
| **Providing counter arguments** | Provides a counter argument to any of Perry’s arguments. | Provides counter argument to more than one of Perry’s arguments. | Provides counter argument to Perry’s arguments. |
| **Justifying arguments** | Bases own arguments on opinions and/or scientific facts. | Bases own arguments on scientific facts. | Bases own arguments on scientific facts. |
| **Using scientific knowledge** | Attempts to use scientific concepts, models, and theories for supporting arguments. | Uses scientific concepts, models, and theories for supporting arguments. | Uses relevant scientific concepts, models, and theories in a correct way for supporting arguments. |