**Climate Change in the Arctic**

**Modelling the Greenhouse Effect - Checklist**

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| --- | --- | --- |
|  | Shown on Diagram | Labelled on Diagram |
| Solar radiation passes through the clear bottle and the gas in the bottle. |  |  |
| Some solar radiation is reflected by the clear bottle and the pop’s surface. |  |  |
| Solar energy is absorbed by the pop and warms it … |  |  |
| … and is converted into heat causing the emission of longwave (infrared) radiation back to the gas in the bottle. |  |  |
| Some of the infrared radiation is absorbed and re-emitted by the greenhouse gas molecules. The direct effect is the warming of the pop and the gas in the bottle. |  |  |
| The pop gains more heat and infrared radiation is emitted again. |  |  |
| Some of the infrared radiation passes through the air in the bottle and the clear bottle and is lost. |  |  |