

The Greenhouse Gas Board Game

Rationale

Climate change is a tricky topic to teach to children, but a necessary one. Learning for Sustainability is now embedded in the Curriculum for Excellence, and is a Responsibility for All, which means that Sustainability should be included in every Curriculum Area. Biosphere Explorers is an environmental education project initiated by the Crichton Carbon Centre, aiming to bring the key concepts to the classroom in an accessible and interesting way. The Greenhouse Gas Board Game is a group activity devised to reinforce the concepts underlying climate change, while incorporating numeracy, literacy and science. As well as being fun to play, the game gives a visual representation of the effects that human activity can have on the concentrations of greenhouse gases in our atmosphere.



Game Pieces

People counters



Dice



Greenhouse Gas counters



Activity cards



There are 16 red cards and 16 green cards. The red cards, when drawn, add greenhouse gases to the atmosphere. The green cards remove greenhouse gases from the atmosphere.

How to Play

Round 1

In the first round of the game, only the red cards are used. These add greenhouse gases to the atmosphere. Once all the children have gone round the board, the atmosphere is full of greenhouse gases. This demonstrates how humans have lived since the industrial revolution. All the gas counters are left on the board for Round 2.



Round 2

This round is played with both the red and green cards; sometimes gases are added and sometimes they are removed, depending on whether you land on a red or a green square on the board. This represents how we live now, some of the things humans do have positive effects and some have negative effects. This results in the board having a similar amount of gases as at the beginning of the round.



Round 3

Only the green cards are used. This means that only positive actions are taken and greenhouse gases are steadily removed from the atmosphere. The board ends with few or no counters left in the atmosphere. This represents how humans must act going forward to avert climate change disaster and save the planet!



Implications for Climate Change Action

The Greenhouse Gas Board Game has proved to be an engaging and effective way of introducing children to the concepts behind climate change science. Playing the game builds a foundation towards fully understanding the actions that everyone can take to mitigate climate change. A copy of the game has been given to every primary school in the Galloway Glens Landscape Area and more copies are available to borrow from the Crichton Carbon Centre on request. More about the Biosphere Explorers project, including all the resources, can be found at:

www.carboncentre.org

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