

Climate Change Game for Assemblies

Based on the success of the CAFOD's *Climate Change Game* this interactive game is a way of getting students up out of their seats and engaging in an interactive way – with a little help from their friends.

Game Rules

This game is designed to be played as part of an assembly or a large group (if you are playing this with a smaller group you might want to use the actual *Climate Change* board game instead). The game requires two teams, so you will need to split your audience into two. Then you need one volunteer on each team to come up to the front with you and answer the questions, and they can choose a friend to come up with them to be their 'play piece'. You simply ask each player a question from the quiz sheet (see below) and every time they answer a question correctly their 'play piece' simply moves forward a space. There are two quiz sheets:

1. KS2-3 questions (pgs 2-5),
2. KS3-5 questions (pgs 6-8)

Some of the questions are quite difficult, so will be a chance for a bit of guesswork and help from their teams.

Setting up the 'board'

For this game to work, you need a game board for them to play on. Simply translated, you need something marked out on the floor so that each player moves from one side of the room to the other. The first to reach the end is the winner.

There are several ways in which you can set up the game board. The best way is to get masking tape and to mark out a grid of 10x10 squares. If you have time you could put numbers in each square, but that is not necessary. Alternatively, you can tape down some sheets of paper, each with a footprint on them. Every time the player gets something right then they move forward one footprint.



If you have no time to set up a board, you can always use mark out a line at the end of the hall which each person has to cross, and they can just take a step forward each time their player gets a question correct. Could be more fun as they will try to take the biggest step they can ...

The player that wins can receive a prize if you have one, or simply a round of applause. Feel free to enact a gameshow host personality when you play this! The more you are having fun, the more they will.

The game is meant to be fun and engaging. It is not meant to single anyone out and embarrass them into not knowing the answers. So if you are playing the game please be aware of this and take into consideration the following:

- The game requires two players to come up to the front and help you. How will you choose these volunteers? In primary schools if you ask for a volunteer you may have hundreds of willing children eager to help. In secondary schools if you ask, you may be met with silence and no-one willing to come up and give you a hand! So you may want to ask the teacher beforehand to select some students for you (that way you know that you'll get the ones more willing to participate).
- Alternatively, if the students are sitting down on chairs (as in Secondary schools) then you might want to put a winning ticket sellotaped under two chairs. That way, when they sit down you can tell them that two of the students are eligible for a prize (Fairtrade chocolate bar, perhaps?) and that they will find the two winning tickets taped under their chairs. Ask everyone to search under their chairs, and bring to the front the two lucky 'winners'.
- Get the two volunteers to select from the audience their friends who will be their 'play pieces' on the board game.
- Have two 'quiz masters' asking the question. Get another teacher to help you. That way if the students get too loud a teacher will be on hand to bring things within control. Also, it is more dynamic if there are two of you are asking questions.
- Play the audience. Get them to help their player as much as possible. The player who is answering the questions should only be facilitating what the rest of their group is shouting out to them. This way it makes it more fun and it will avoid embarrassment if they do not know the answer.
- Judge your audience. If you have a very big audience (i.e. a whole school), then it may not be possible to get everyone to shout out answers to help your players. You may then allocate the front two rows to help your players, or ask everyone to raise their hand if they think the answer is A, B or C etc.
- Continually praise each player, whether they get the answer right or wrong.
- Make sure that this game is fun and not too competitive. If one team is doing really well, then give hints to the other team so that they can catch up!



Player 1

- Q: On average every person in the UK throws away their own body weight in rubbish every
- A: 3 weeks
 - B: 5 weeks
 - C: **7 weeks**

Player 2

- Q: What are greenhouse gases?
- A. **Gases that trap heat above the earth**
 - B. Gases that are made by plants growing in greenhouses
 - C. Gases that are used to heat greenhouses so that they are nice and warm

Player 1

- Q: Which of the following is not a greenhouse gas?
- A. Methane
 - B. **Oxygen**
 - C. Carbon Dioxide

Player 2

- Q: Which of the following is not a source of methane:
- A. Landfills
 - B. Cows
 - C. **Clouds**

Player 1

- Q: How can you help to slow global warming?
- A. Save electricity
 - B. Plant trees
 - C. Recycle
 - D. **All of the above**

Player 2

- Q: Which one of these activities sends greenhouse gases into the atmosphere?
- A. **Riding in a car**
 - B. Riding a bike
 - C. Walking

Player 1

- Q: What is the biggest contributor of CO₂ (carbon dioxide)?
- A: Aviation
 - B: **Electricity generation**
 - C: Driving

Player 2

- Q: A PC monitor left on standby overnight all year uses the equivalent electricity to how many kettles boiling?
- A: 50
 - B: 100
 - C: **500**

Player 1

- Q: How many people in Asia could be facing a major water shortage if current rates of carbon emissions continue?
- A: 10 million
 - B: 50 million
 - C: **1 billion**

Player 2

Q: How long do you think it takes a plastic bag to decompose?

- A: 50 years
- B: 100 years
- C: 200 years

Player 1

Q: Which decade is widely known as the “hottest decade” since 1861 when scientists began to keep reliable records of air temperatures?

- A. 1930's
- B. 1950's
- C. 1990's

Player 2

Q: Which animal gives off the most methane gas, which helps to speed up climate change?

- A. Sheep
- B. Goats
- C. Cows

Player 1

Q: Where does the energy come from which keeps the earth warm?

- A. Moon
- B. Sea
- C. Sun

Player 2

Q: What is the name of the effect that stops some of the earth's heat from radiating back into space?

- A. the refrigeration effect
- B. the greenhouse effect
- C. the hothouse effect

Player 1

Q: What might happen if there is too much carbon dioxide in the atmosphere?

- A. the temperature might go up, so there will be global warming
- B. the temperature might go down, so there will be global cooling
- C. the oceans will dry up, so there will be global drying

Player 2

Q: How can you stop global warming?

- A. save energy by not running around so much
- B. save energy by going to school in a car
- C. save energy by using less electricity or petrol

Player 1

Q: Which of these is the best way to stop global warming in your house on a cold day?

- A. Keep warm by turning up the heat
- B. Boiling the kettle and keep warm by drinking hot drinks
- C. Keep warm by putting on a woolly jumper

Player 2

Q: Which of these is the best way to stop global warming when you travel?

- A. Get a lift to school with your friends
- B. Encourage your parents to give you a lift in the car
- C. Walk to school with a group of friends and an adult

Player 1

Q: Which of these is the best way to stop global warming around your school?

- A. leave computers and lights on when you leave the room
- B. recycle rubbish and turn off lights and computers when you leave the room
- C. use only one side of paper and leave litter lying around the playground

Player 2

Q: Which one of these is true

- A. it is too late to stop global warming
- B. only politicians can stop global warming
- C. everyone can do their bit to stop global warming

Player 1

Q: Which uses the most energy in a house?

- A. Lights
- B. Heating
- C. Fridge

Player 2

Q: What would happen if we had no greenhouse gases in our atmosphere?

- A. The earth would get very hot
- B. The earth would get very cold
- C. Nothing. It wouldn't make any difference

Player 1

Q: What do the three 'R's stand for?

- A. Relax, reflect and rest
- B. Reduce, reuse and recycle
- C. Refuse, reject, release

Player 2

Q: Energy saving light bulbs uses less electricity to produce the same amount of light as an ordinary bulb. How much longer do they last?

- A. 2 times longer
- B. 5 times longer
- C. over 8 times longer

Player 1

Q: How many greenhouse gases are there?

- A. 6 – carbon dioxide, nitrous oxide, methane, CFC's, Water vapour, ozone
- B. 8
- C. 10

Player 2

Q: What percentage of Greenhouse Gas emissions come from air travel?

- A. 7%
- B. 13%
- C. 25%

Player 1

Q: What percentage of Greenhouse Gas emissions come from road travel?

- A. 62%
- B. 59%
- C. 79%

Player 2

Q: How much energy does a standard TV set waste?

- A. up to 25%
- B. up to 50%
- C. up to 65%

Player 1

Q: Which of the following is a green energy source?

- A. Coal power
- B. Hydro power
- C. Nuclear power

Player 2

Q: Which one of these is not a fossil fuel?

- A. Solar
- B. Coal
- C. Gas

Player 1

Q: What are the yearly CO₂ emissions of the average world citizen?

- A: 3200kg CO₂ equivalent
- B: 2040 kg CO₂ equivalent
- C: 4080 kg CO₂ equivalent

Player 2

Q: How many greenhouse gases are there?

- A: 6 – carbon dioxide, nitrous oxide, methane, CFC's, Water vapour, ozone
- B: 8
- C: 10

Player 1

Q: If we carry on polluting the atmosphere at the same rate we are doing now what will be the average temperature increase by 2100?

- A: 4.6 degrees C
- B: 6.4 degrees C
- C: 12.2 degrees C

Player 2

Q: In order to avoid dangerous climate change, by how much would we in the UK have to reduce our emissions?

- A: At least 80% based on 1990 levels
- B: 70% on 1990 levels
- C: 90% on 1990 levels

Player 1

Q: By how much has global economic output risen since 1987?

- A: 42%
- B: 64%
- C: 76%

Player 2

Q: What percentage of Greenhouse Gases emissions come from air travel?

- A: 7%
- B: 13%
- C: 25%

Player 1

Q: What percentage of Greenhouse Gases emissions come from road transport?

- A: 62%
- B: 59%
- C: 79.5%

Player 2

Q: How much does the global cement industry contribute to CO₂ emissions?

- A: 0.2%
- B: 3.6%
- C: 5%

Player 1

Q: What percentage of Green house gas emissions does food chain production cost the EU?

- A: 31%
- B: 41%
- C: 45%

Player 2

Q: What is the annual methane emissions of a cow's burps and farts?
 A: 2400 kg CO2 equivalent
 A: **3500 kg CO2 equivalent**
 C: 4200kg CO2 equivalent

Player 1

Q: How much energy does a standard TV set/DVD player waste?
 A: Up to 25%
 B: **Up to 50%**
 C: Up to 65%

Player 2

Q: How much money are we losing per year due to forest loss?
 A: \$1-2 trillion per year
 B: **\$2-5 trillion per year**
 C: \$3-8 trillion per year

Player 1

Q: How much money has the financial crisis cost us in 2008?
 A: £3-8 trillion
 B: **£1-1.5 trillion**
 C: £2-7 trillion

Player 2

Q: Between 1990-2001, to achieve a single dollar of poverty reduction, how many dollars of extra global production and consumption is needed?
 A: \$60
 B: \$128
 C: **\$166**

Player 1

Q: An adult from Tanzania produces the same amount of carbon dioxide as someone how old in the UK?
 A: **22 weeks old**
 B: 12 year old
 C: 22 year old

Player 2

Q: If everyone in the world lived like we do in the UK, how many planets would it take to sustain us?
 A: **3.4 planets**
 B: 3.2 planets
 C: 3.6 planets

Player 1

Q: If everyone in the world lived like they do in China, how many planets would it take to sustain us?
 A: **0.8 planets**
 B: 1.6 planets
 C: 2.4 planets

Player 2

Q: How much do China's exports to other countries contribute towards their CO2 emissions?
 A: 14%
 B: **23%**
 C: 34%

Player 1

Q: For every ten tonnes of CO₂ in the atmosphere today, how many tonnes are the developed countries responsible for?

- A: 7 tonnes
- B: 10 tonnes
- C: 14 tonnes

Player 2

Q: how many people in Africa will be at further risk of water stress in 2020 due to climate change?

- A: extra 140 million people
- B: extra 250 million people
- C: extra 320 million people

Player 1

Q: how much will rain-fed agriculture in Africa reduce by in 2020?

- A: 14%
- B: 26%
- A: by 50%

Player 2

Q: of the 600,000 deaths worldwide that occurred in the 1990s due to weather-related natural disasters, what percentage of those deaths were in developing countries?

- A: 50%
- B: 75%
- C: 95%

Player 1

Q: how many people on the planet live on coastal floodplains?

- A: 60 million
- B: 110 million
- C: 200 million

Player 2

Q: If we exceed average increases in global temperature of 2 degrees, what percentage of the world's species could face extinction?

- A: up to 18%
- B: up to 32%
- C: up to 40%

Player 1

Q: By how much did we ask the UK government to reduce its GHG emissions on the Climate Change Bill?

- A: at least 60%
- B: at least 70%
- C: at least 80%