Climate Change Game

First player/team to reach ZERO NET EMISSIONS is the winner

Ages: 12+

Time: 30 - 45 mins

Purpose:
To learn about climate change in a fun way.

Youth work outcomes:

Outcome 4: Young people participate safely and effectively in groups
Outcome 6: Young people express their voice and demonstrate social commitment

Sustainable development goals:

How it works:

The game can be played in teams or as individuals, or as a mixture of both; it is up to participants. This will have an impact on the time required to play the game.

Print out and stick the question and answer cards back to back so they match up.

Shuffle the cards and place on the table with questions side face up.

Read out the trivia question on the top card and the four possible answers. Once every player has chosen one of the four answers to the question, turn over the card and check how correct your answer is.

Move your token the number of spaces depending on how correct your answer to the question is – best answers moves 4 spaces, next closest 3 spaces and so on until the worst answer moves only one space.

Hint: Players should look ahead to the bonus/penalty squares. Perhaps you don't want to guess the answer exactly right if you end up going back a couple of spaces or miss a turn.

The winner is the first to reach Zero Net Emissions.

In person:
Board game, question cards, place markers.

Online:
To play virtually, have a facilitator who can read out or type the questions and potential answers. Players could move their 'marker' if you use an interactive screen.

Description:
- Which answers surprised you?
- In what ways does the board game reflect real life progress on climate change?
- How has the game made you reflect on your own habits?

Actions/next steps:
Now that participants understand more about emissions they could explore how to reduce their individual carbon footprint. WWF have a Carbon Footprint Questionnaire that gives helpful suggestions on how to make positive changes.

Explore one of the trivia question topics in more detail. Perhaps the group are most interested in sustainable transport or food behaviours. Use other activities in this toolkit to dive deeper.

Keep Scotland Beautiful

YouthLink Scotland
The national agency for youth work

Scottish Government
Riaghaltas na h-Alba
gov.scot

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Zero Net Emissions

Start

November 2019 - USA begins formal withdrawal process from the Paris agreement.

Miss a turn.

The 5 hottest years ever recoded globally since 1850 are: 2016, 2015, 2017, 2018 and 2014.

Go back 2 spaces.

Sept 2019 - Scottish Government commits to zero carbon emissions by 2045.

Move forward 2 spaces.

2016 - Paris Agreement - 221 countries agree to pursue efforts to limit Global Warming to 1.5 °C.

Move forward 3 spaces.

2015 levels of Carbon Dioxide in the atmosphere reach 400 parts per million.

Go back 3 spaces.

1995 United Nations IPCC Report that human activity is impacting on climate.

Go back 2 spaces.

2005 levels of Carbon Dioxide in the atmosphere reach 380 parts per million.

Miss a turn.

1988 United Nations creates the Intergovernmental Panel on Climate Change.

Move forward 2 spaces.

1988 levels of Carbon Dioxide in atmosphere reaches 350 parts per million.

Miss a turn.

1870 Carbon Dioxide levels in atmosphere are 290 parts per million and starts to rise.

Go back 1 space.

Hint

Look at the various bonus and penalty squares to determine which answer to choose that helps to best achieve victory.

YouthLink Scotland The national agency for youth work

Scottish Government Riaghaltas na h-Alba gov.scot

Questions

1. Eating beef 1-2 times a week for a year has the equivalent greenhouse gas emissions as driving a regular petrol car how many miles?

a. 1000 miles
b. 500 miles
c. 1500 miles
d. 800 miles

2. What was the record highest ever recorded temperature, in Antarctica, in February 2020?

a. 11.4 °C
b. 13.1 °C
c. 5.9 °C
d. 18.3 °C

3. Which behaviour has the highest greenhouse gas emissions?

a. Driving a car 750 miles
b. Taking 100 showers
c. Heating a home for a month
d. Eating a bar of Chocolate a day for a year

4. Which behaviour change would save the most greenhouse gas emissions?

a. Not use a computer for a day
b. Not drive 5 miles
c. Not use 3 plastic bottles
d. Not use 5 plastic bags

5. If you cycled 5 miles a day, instead of driving an average petrol car, how much greenhouse gas emissions would you save a year?

a. 500kg
b. 400kg
c. 350kg
d. 250kg

6. Which has the lowest carbon emissions per 200ml serving?

a. Rice Milk
b. Almond Milk
c. Dairy Milk
d. Soy Milk

7. Which journey has the LOWEST carbon emissions in the UK?

a. 100km by electric car
b. 200km by train
c. 125km by bus
d. 75km by plane

8. How much CO2 does the average household in the UK emit per year?

a. 1.4 tonnes
b. 2.8 tonnes
c. 6.1 tonnes
d. 9.3 tonnes

9. Which behaviour change in the home would save the most UK energy in a year?

a. Switching off the TV when not watching
b. Reduce shower time to 5 minutes
c. Turn off all unnecessary lights
d. Turn the thermostat down 1°C

10. “Fast Fashion” accounts for what percentage of all human greenhouse gas emissions?

a. 2%
b. 7%
c. 10%
d. 15%

11. Greenland is estimated to be losing, on average, how much ice a year?

a. 50 billion tonnes
b. 100 billion tonnes
c. 200 billion tonnes
d. 250 billion tonnes

12. Which produces the most tonnes of greenhouse gas emissions in a year?

a. The Internet
b. The fashion industry
c. Loss of tropical rainforest
d. Global air travel

13. Which behaviour change in the kitchen would save the most UK energy in a year?

a. Don’t overfill the kettle
b. Cook only with a Microwave
c. Cook with lids on saucepans
d. Only use dishwasher when full

14. Scotland accounts for how much of the UK carbon emissions?

a. 10%
b. 15%
c. 20%
d. 25%

15. Which sector has the highest carbon emissions in Scotland?

a. Buildings
b. Transport
c. Industry
d. Agriculture

16. Which behaviour has the LOWEST greenhouse gas emissions?

a. Eating a banana a day for a year
b. Driving 100 miles
c. Heating a house for a week
d. Drinking a cup of coffee a day for a year

17. Which sector is responsible for the highest proportion of human greenhouse gas emissions?

a. Transport
b. Energy
c. Agriculture
d. Industry

18. For Scotland, which sector has reduced greenhouse gas emissions the LEAST since 1990?

a. Energy
b. Transport
c. Agriculture
d. Waste

19. By when in Scotland will you no longer be able to buy a new petrol or diesel car?

a. 2030
b. 2032
c. 2040
d. 2045

20. Which farmed food has the most greenhouse gas emissions?

a. Chicken
b. Pork
c. Beef
d. Fish

Answers

1. Eating beef 1-2 times a week:

a. 1000 miles (3)
b. 500 miles (1)
c. 1500 miles (4)
d. 800 miles (2)

2. Antarctica temperature record:

a. 11.4 °C (2)
b. 13.1 °C (3)
c. 5.9 °C (1)
d. 18.3 °C (4)

3. Which behaviour highest:

a. Car 295kg (3)
b. Shower 90kg (1)
c. Home 190kg (2)
d. Chocolate 375kg (4)

4. Which behaviour:

a. Computer 0.8kg (1)
b. Drive 1.3kg (3)
c. Bottles 1.5kg (4)
d. Plastic bags 1.0kg (2)

5. Cycling 5 miles a day for a year:

a. 500kg (4)
b. 400kg (3)
c. 350kg (2)
d. 300kg (1)

6. Types of milk:

a. Rice Milk 0.24kg (2)
b. Almond 0.15kg (4)
c. Dairy 0.60kg (1)
d. Soy 0.19kg (3)

7. UK Journey:

a. Car 6.4kg (2)
b. Train 5.6 kg (4)
c. Bus 6.0kg (3)
d. Plane 8.5kg (1)

8. Average UK emissions:

a. 1.4 tonnes (1)
b. 2.8 tonnes (2)
c. 6.1 tonnes (3)
d. 9.3tonnes (4)

9. Behaviour change in the home:

a. TV 760 GWh/y (1)
b. Shower 1,700 GWh/y (2)
c. Lights 2,100 GWh/y (3)
d. Heating 16,500 GWh/y (4)

10. Fast fashion:

a. 2% (1)
b. 7% (3)
c. 10% (4)
d. 15% (2)

11. Greenland ice loss:

a. 50 billion tonnes (1)
b. 100 billion tonnes (2)
c. 200 billion tonnes (3)
d. 250 billion tonnes (4)

12. Annual contributions:

a. Internet 300 million (1)
b. Fashion 1200 million (3)
c. Rainforest 4800 million (4)
d. Air travel 915 million (2)

13. Behaviour change in the kitchen:

a. Kettle 1,200 GWh/y (4)
b. Microwave 270 GWH/y (2)
c. Lids 590 GWh/y (3)
d. Dishwasher 150 GWh/y (1)

14. Scotland share of UK emissions:

a. 10% (4)
b. 15% (3)
c. 20% (2)
d. 25% (1)

15. Scotland emissions by sector:

a. Buildings 8.7 $mtCO_2e$ (2)
b. Transport 14.9 $mtCO_2e$ (4)
c. Industry 11.0 $mtCO_2e$ (3)
d. Agriculture 8.0 $mtCO_2e$ (1)

16. Which behaviour lowest:

a. Banana 25kg (4)
b. Car 39kg (3)
c. House 58kg (2)
d. Coffee 155kg (1)

17. Highest proportion of human greenhouse gas emissions?

a. Transport (3)
b. Energy (4)
c. Agriculture (1)
d. Industry (2)

18. For Scotland, which sector has reduced greenhouse gas emissions the LEAST since 1990?

a. Energy (1)
b. Transport (4)
c. Agriculture (2)
d. Waste (3)

19. By when in Scotland will you no longer be able to buy a new petrol or diesel car?

a. 2030 (3)
b. 2032 (4)
c. 2040 (2)
d. 2045 (1)

20. Which farmed food has the most greenhouse gas emissions?

a. Chicken (2)
b. Pork (3)
c. Beef (4)
d. Fish (1)