

101 Ways to Live Cleaner and Greener for Free Bingo Game

Aim of the game

To enable conversations arising from the maths and science sections in ***101 Ways to Live Cleaner and Greener for Free***. To make the learning fun and to allow for repetition of the learning as each time the game is played it will be different.

You will need:

This will make up to 10 bingo boards. You can choose how many you need according to your group size. I usually use 5 or 6 boards in a class of 30 but I've used this for a group of 60 students using all 10 boards.

- 5 cardboard cereal boxes
- 10 sheets of A4 paper with one unused side (printable)
- Marker pens & ruler
- Cardboard packaging e.g. tea bag boxes, chocolate boxes, soap powder boxes to cut into rectangles to back each bingo card
- A sturdy elastic band to keep the bingo cards together and a large paper clip or bulldog clip for the boards
- 90 counters to mark off the numbers on the bingo boards as they have been found. I use two sets of old playing cards for this. (optional)
- Willing volunteers to do the cutting and sticking (optional)

How to make your bingo game:

1. Cut out the 2 largest faces from the 5 cereal packets to make the bingo boards.
2. Mark up your bingo cards with a 3 by 3 grid.
3. Print out the 8 sets of bingo cards below. These are ideal to print onto old letters or worksheets that only use a single side as you will be sticking the bingo cards onto cardboard to make them more robust.
4. Use a marker pen to write the numbers from each bingo card page onto the bingo boards.
5. Cut out your bingo cards.
6. Cut out cardboard backings for the bingo cards from your collection of cardboard packaging. You need 72 backs altogether if you are making all 8 bingo cards.
7. Stick the bingo cards onto the cardboard backs.

How to play

Allocate teams of 3-6 players.

Each child will need access to a copy of *101 Ways to Live Cleaner and Green for Free*. If you don't have enough for a copy each, these could be shared in teams and team roles can be allocated and swapped around at regular intervals: researcher(s) to look up the number, scribe to write out the fact that number relates to and spokesperson to read out the fact to the class.

There are several cards with the same number as some of the numbers appear on several boards. If you have the cards sorted by number you can give the cards out as your counters to show the number has been found. If they are unsorted you can either give the card only to the person who gave the answer or you can use the counters (e.g. the old playing cards or extra bits of cardboard similar to the cardboard backs.)

Ask someone to select a card, read out the number and ask students to find that number in the book. When they have found that number they need to write out what the number means and raise their hand to show they have found the answer. Ask someone to read out the answer.

Give out the card to that person or (for a shorter game which is usually plenty) give a card or a counter to each team that has the number on their bingo board. I use the shorter method as I use each card/number as the starting point for a conversation about the fact and develop each one as the subjects arise.

The winning team will be the first team to get a line or a full board if you/they are really quick at finding the numbers in the book or start to remember them.

Cards only version

I have used just the bingo cards on their own for school assemblies. It makes the talk feel interactive as students get to pick a card to direct the topic in a random way. This could also work for a warm-up or end of session 15 minutes, where three people pick a card and you talk through each one.

Feedback

Please feel free to email suggestions for improvements to anna@dustbindiet.com or tell me about when you have used the game with your students.

Thank you.

6,810 litres

The amount of water it takes to produce 1 lb of beef (i.e. the water the cow has drunk and the water required to grow the food it has eaten).

0.009 kWh

The amount of electricity (Kilowatt hours) a mobile phone charger uses in a day.

150 litres

Average person's daily water usage in UK.

27 minutes

The amount of TV you can watch with the energy saved from recycling a 500ml plastic drink bottle.

8,000,000 tonnes

The amount of food and drink wasted in a year in homes throughout the UK.

26 times

The average number of times a library book can be lent out (according to Harper Collins).

£180

Money saved if 2 children take in tap water instead of buying bottled water for a school year.

6 minutes

The amount of TV you can watch with the energy saved from recycling a cardboard toilet roll tube.

1/4

The amount of food the average UK family wastes i.e. a quarter of what they buy.

0.009 kWh

The amount of electricity (Kilowatt hours) a mobile phone charger uses in a day.

450 litres

The amount of water it takes to grow a pound of potatoes.

150 litres

Average person's daily water usage in UK.

90 minutes

The amount of TV you can watch with the energy saved from recycling a cereal box (or a wine bottle or 2 x 2 litre plastic drink bottles).

50 pence

The cost of drying a load of washing in the tumble drier.

33%

The amount of our water we use for toilet flushing.

8,000,000 tonnes

The amount of food and drink wasted in a year in homes throughout the UK.

6 minutes

The amount of TV you can watch with the energy saved from recycling a cardboard toilet roll tube.

1/4

The amount of food the average UK family wastes i.e. a quarter of what they buy.

17

The number of trees saved by recycling a tonne of paper.

450 litres

The amount of water it takes to grow a pound of potatoes.

90 minutes

The amount of TV you can watch with the energy saved from recycling a cereal box (or a wine bottle or 2 x 2 litre plastic drink bottles).

8 minutes

The average time people in the UK spend in the shower.

50 pence

The cost of drying a load of washing in the tumble drier.

33%

The amount of our water we use for toilet flushing.

$\frac{1}{4}$

The amount of food the average UK family wastes i.e. a quarter of what they buy.

6 minutes

The amount of TV you can watch with the energy saved from recycling a cardboard toilet roll tube.

1,315,000,000 litres

The water that would be saved every day in the UK if every household reduced their water consumption by 10%.

450 litres

The amount of water it takes to grow a pound of potatoes.

288 litres

The water saved every week if a family of four reduced their shower time from 8 minutes to 4 minutes for 4 days a week.

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The amount of TV you can watch with the energy saved from recycling a cereal box (or a wine bottle or 2 x 2 litre plastic drink bottles).

50 pence

The cost of drying a load of washing in the tumble drier.

8,000,000 tonnes

The amount of food and drink wasted in a year in homes throughout the UK.

33%

The amount of our water we use for toilet flushing.

3,726 tonnes

The CO₂e saved in a year from people reusing their plastic bags at Marks and Spencer.

6 minutes

The amount of TV you can watch with the energy saved from recycling a cardboard toilet roll tube.

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The water that would be saved every day in the UK if every household reduced their water consumption by 10%.

15%

The target percentage of renewable energy use in the UK for year 2020.

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54 minutes

The amount of TV you can watch with the energy saved from recycling two 500ml plastic drinks bottles.

1.5 tonnes

The CO₂e saved from using one tonne of rPET (recycled plastic) instead of PET (plastic) from raw materials.

15%

The target percentage of renewable energy use in the UK for year 2020.

13

The number of times, on average, glass milk bottles are reused.

1700 litres

The amount of water it takes to grow a pound of rice.

0.5 tonnes

The CO₂e saved by sending a tonne of food waste to anaerobic digestion instead of landfill.

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The amount of our water we use for toilet flushing.

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The amount of TV you can watch with the energy saved from recycling a cardboard toilet roll tube.

1 tonne

The amount of food waste, on average, produced by 3 households in a year in the UK.

8,000,000 tonnes

The amount of food and drink wasted in a year in homes throughout the UK.

70%

The percentage of water worldwide used for agriculture.

500 tonnes

The CO₂e produced by deforestation of one hectare of land.

13

The number of times, on average, glass milk bottles are reused.

1.5 tonnes

The CO₂e saved from using one tonne of rPET (recycled plastic) instead of PET (plastic) from raw materials.

17

The number of trees saved by recycling a tonne of paper.

360 minutes

The amount of television you can watch for the carbon saving of recycling one magazine.

33%

The amount of our water we use for toilet flushing.

5%

The percentage of the energy required to recycle aluminium compared to making it from raw materials.

130,000,000 tonnes

Yearly CO₂e emissions from transport in the UK.

70%

The percentage of water worldwide used for agriculture.

500 tonnes

The CO₂e produced by deforestation of one hectare of land.

6.8 cubic metres

The amount of landfill space saved by recycling one tonne of cardboard.

1.5 tonnes

The CO₂e saved from using one tonne of rPET (recycled plastic) instead of PET (plastic) from raw materials.

1/4

The amount of food the average UK family wastes i.e. a quarter of what they buy.

£180

Money saved if 2 children take in tap water instead of buying bottled water for a school year.

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