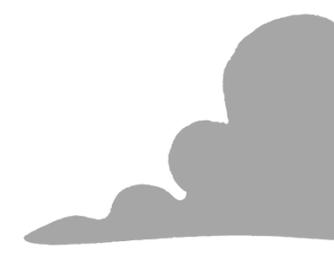




# RACE TO NET ZERO



# GREENHOUSE GASES

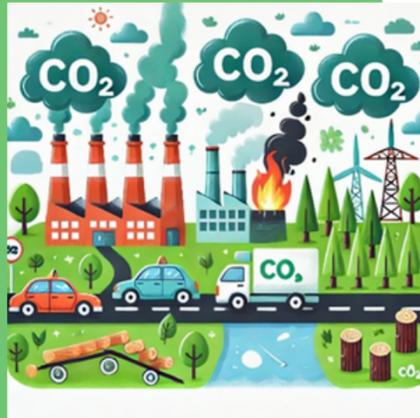
- What are greenhouse gases?
- Why are they causing climate change?



# NET ZERO STORY

Listen to the story and put the pictures in order!

A



B



C



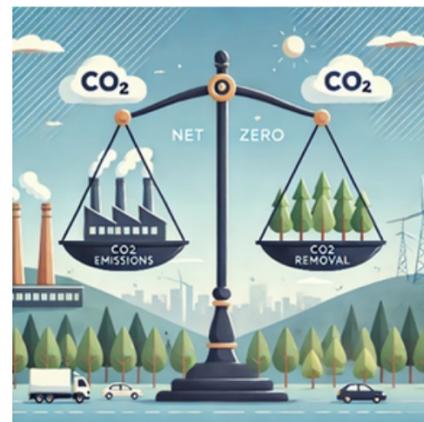
D



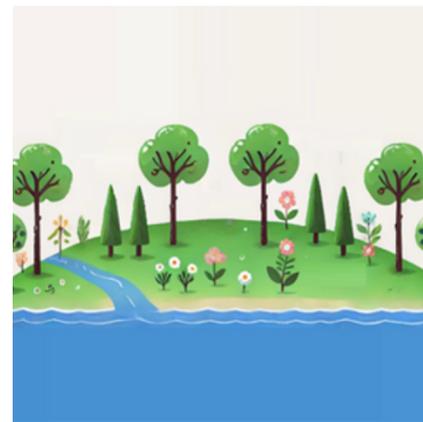
E



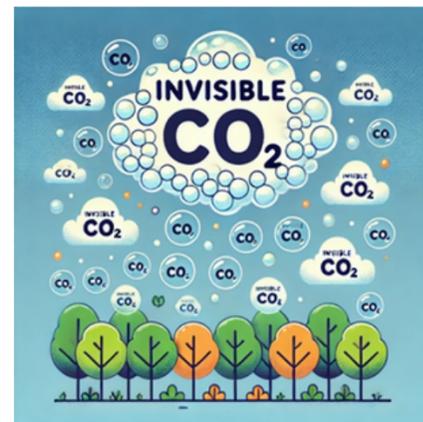
F



G



H



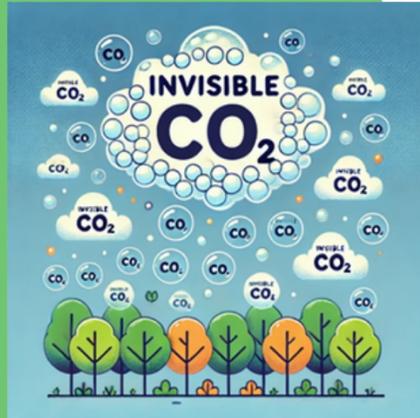
A stylized graphic of a globe, split into teal and green sections, with the word "ANSWERS" written across the center in a bold, dark blue font.

**ANSWERS**

# NET ZERO STORY

EXTENSION: Take turns to tell the CO<sub>2</sub> to another person

H



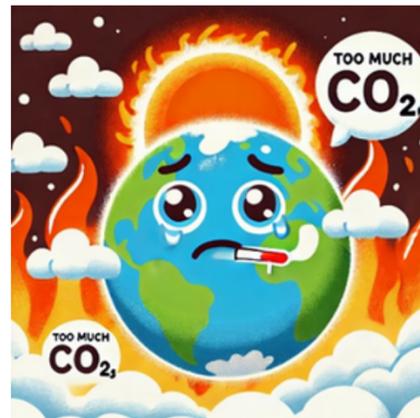
C



E



D



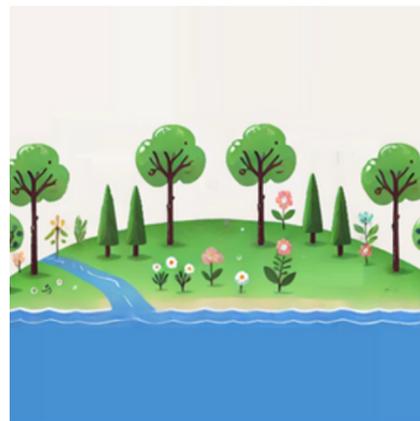
B



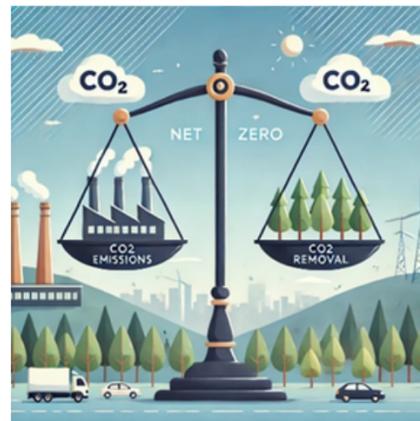
A



G



F



A stylized graphic of the Earth, showing continents in light green and oceans in teal. The top half of the globe is visible, with the text centered across the middle.

# **SOURCES AND SINKS**

# SOURCES AND SINKS

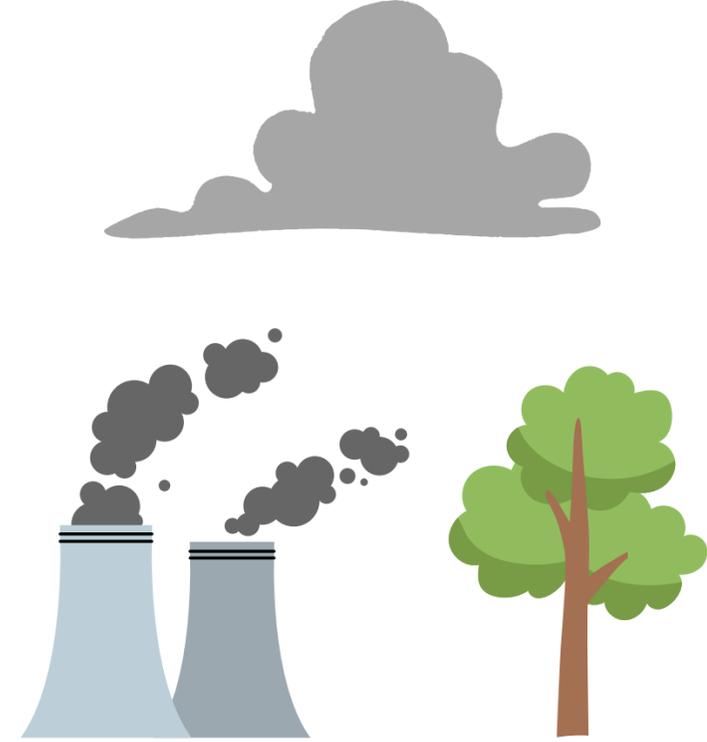
Sort the cards into 2 groups:

## Sources:

- Things that make Carbon Dioxide (CO<sub>2</sub>)
- These are **RED**
- They are bad for the Climate

## Sinks:

- Things that absorb Carbon Dioxide (CO<sub>2</sub>), or mean that we make less
- These are **GREEN**
- They are good for the Climate



# SOURCES AND SINKS

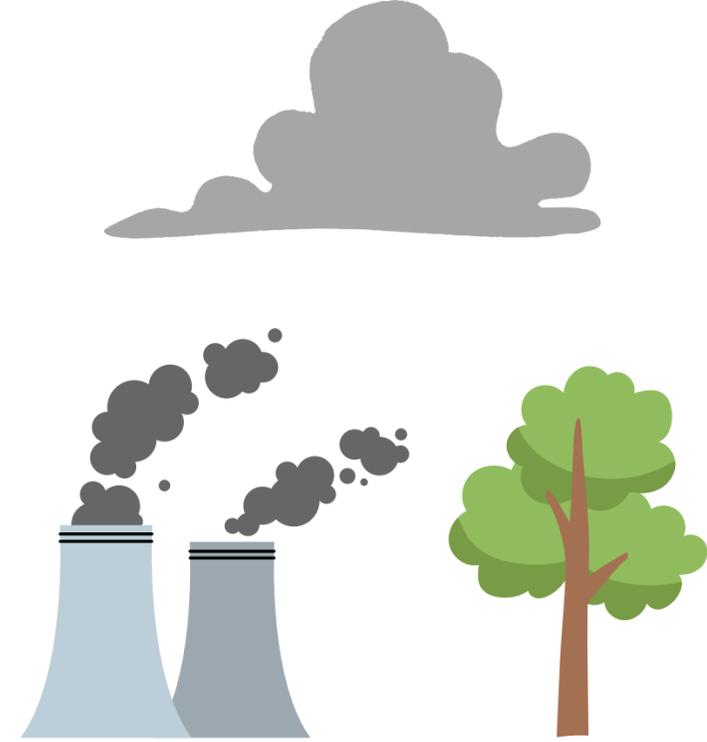
Sort the cards into 2 groups:

## Large Actions:

- Things that big groups of people do to make a big difference to how much Carbon Dioxide (CO<sub>2</sub>) there is
- These have a big arrow

## Small Actions:

- Things that individuals do that make a little difference to how much Carbon Dioxide (CO<sub>2</sub>) there is
- These have a little arrow

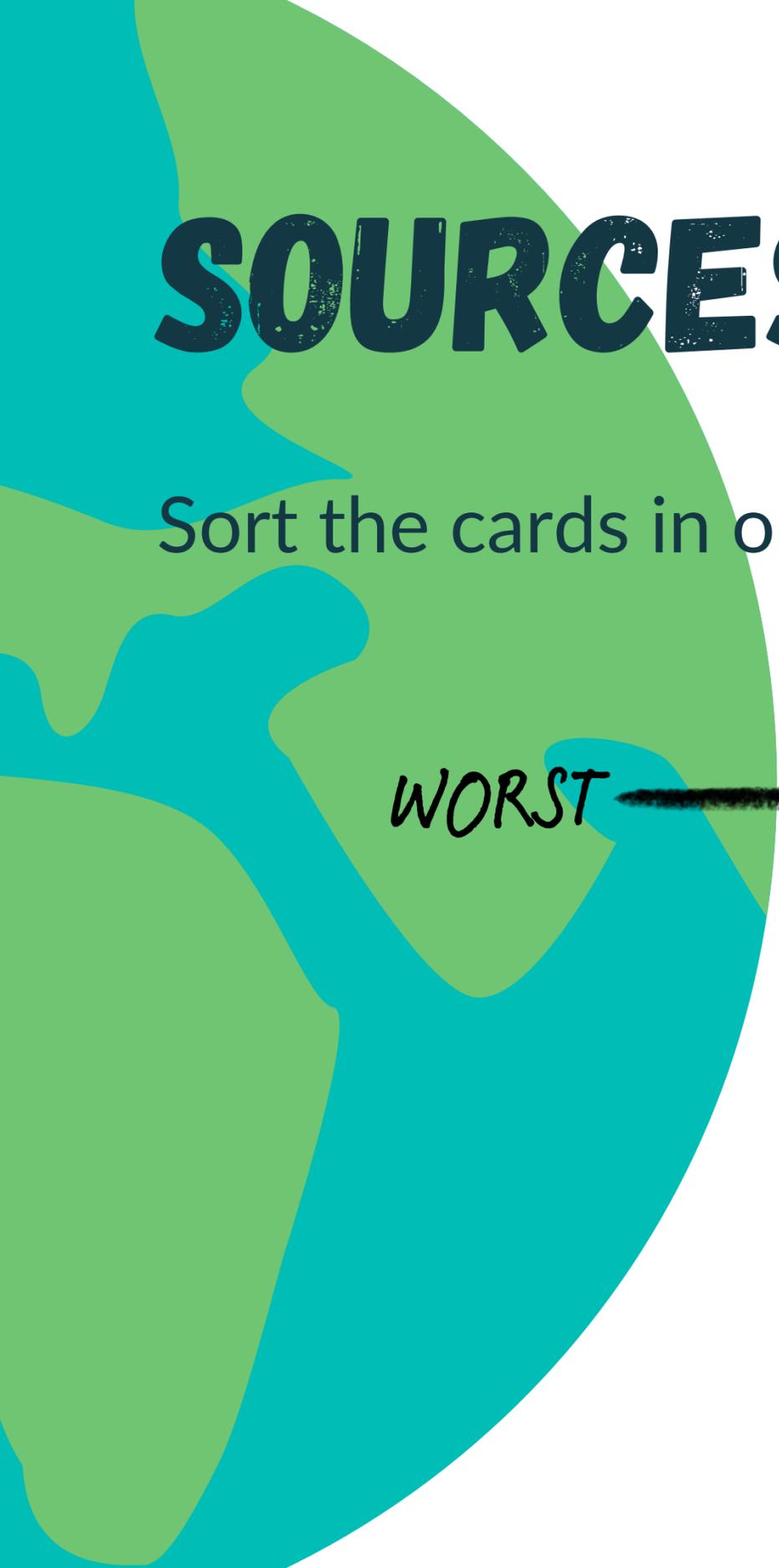


# SOURCES AND SINKS

Sort the cards in order from worst to best for the environment

WORST

BEST



A stylized graphic of the Earth, showing continents in light green and oceans in teal. The graphic is a semi-circle, cut off at the top. The text "NET ZERO BALANCE" is centered horizontally across the middle of the Earth.

**NET ZERO BALANCE**

# NET ZERO BALANCE

Each source and sink has a different impact:

|  |  |
|--|--|
| 25   |  |
|  |  |
| Building Motorways and Roads   |  |
| Building new roads and motorways can mean more cars and CO <sub>2</sub>            |  |

|   |  |
|---|--|
| 3   |  |
|  |  |
| Buying Lots of New Toys and things  |  |
| Making toys and transporting them to shops uses energy and adds CO <sub>2</sub> .   |  |

Let's do the maths to work out what the overall impact is:

$$25 + 3 = 28$$

# NET ZERO BALANCE

Each source and sink has a different impact:

Let's do the maths to work out what the overall impact is:

|   |   |
|---|---|
| 25  |  |
|  |   |
| Building Motorways and Roads  |   |
| Building new roads and motorways can mean more cars and CO <sub>2</sub> .           |   |

|   |   |
|---|---|
| 3   |  |
|  |   |
| Buying Lots of New Toys and things  |   |
| Making toys and transporting them to shops uses energy and adds CO <sub>2</sub> .   |   |

$$25 + 3 = 28$$

|   |   |
|---|---|
| -30   |  |
|  |   |
| Building More Wind Farms  |   |
| Wind farms create clean energy that doesn't add CO <sub>2</sub> .                     |   |

|   |   |
|---|---|
| -4  |  |
|                        |   |
| Your family using public transport  |   |
| Taking a bus or train instead of a car helps cut down on CO <sub>2</sub> and is better for the environment. |   |

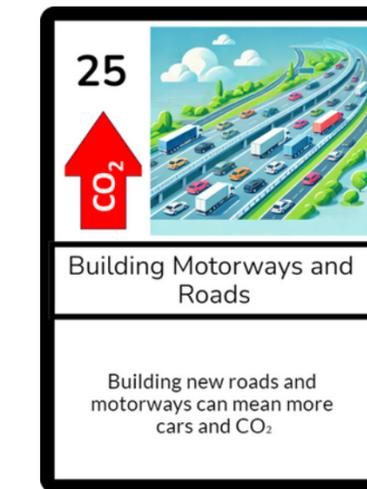
$$30 + 4 = 34$$

Try to make the red sources and the green sinks balance!

# NET ZERO BALANCE

Find a way to balance the CO<sub>2</sub> source cards using the CO<sub>2</sub> sink cards

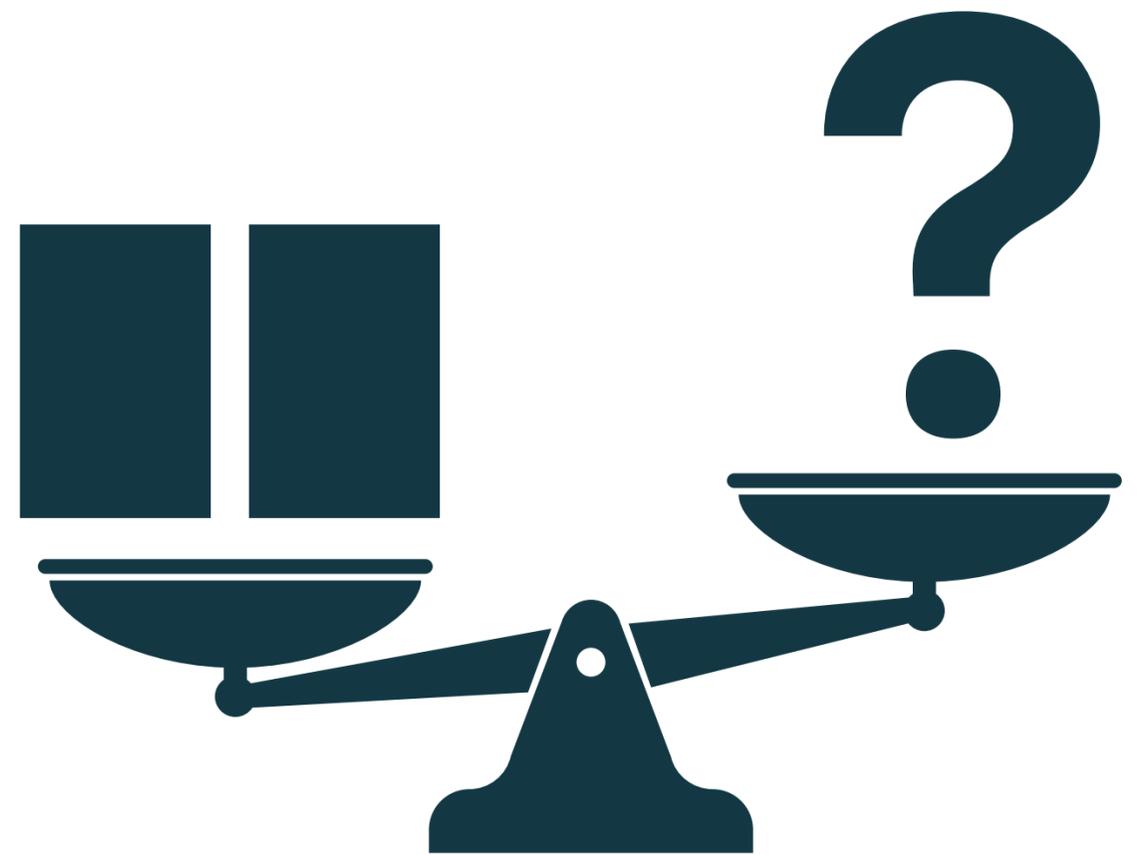
- Can you balance it with 1 card?
- Can you balance it using more than 1 card?
- Extension: How many ways can you find to balance it?



# NET ZERO BALANCE

Pick 2 CO<sub>2</sub> source cards from random

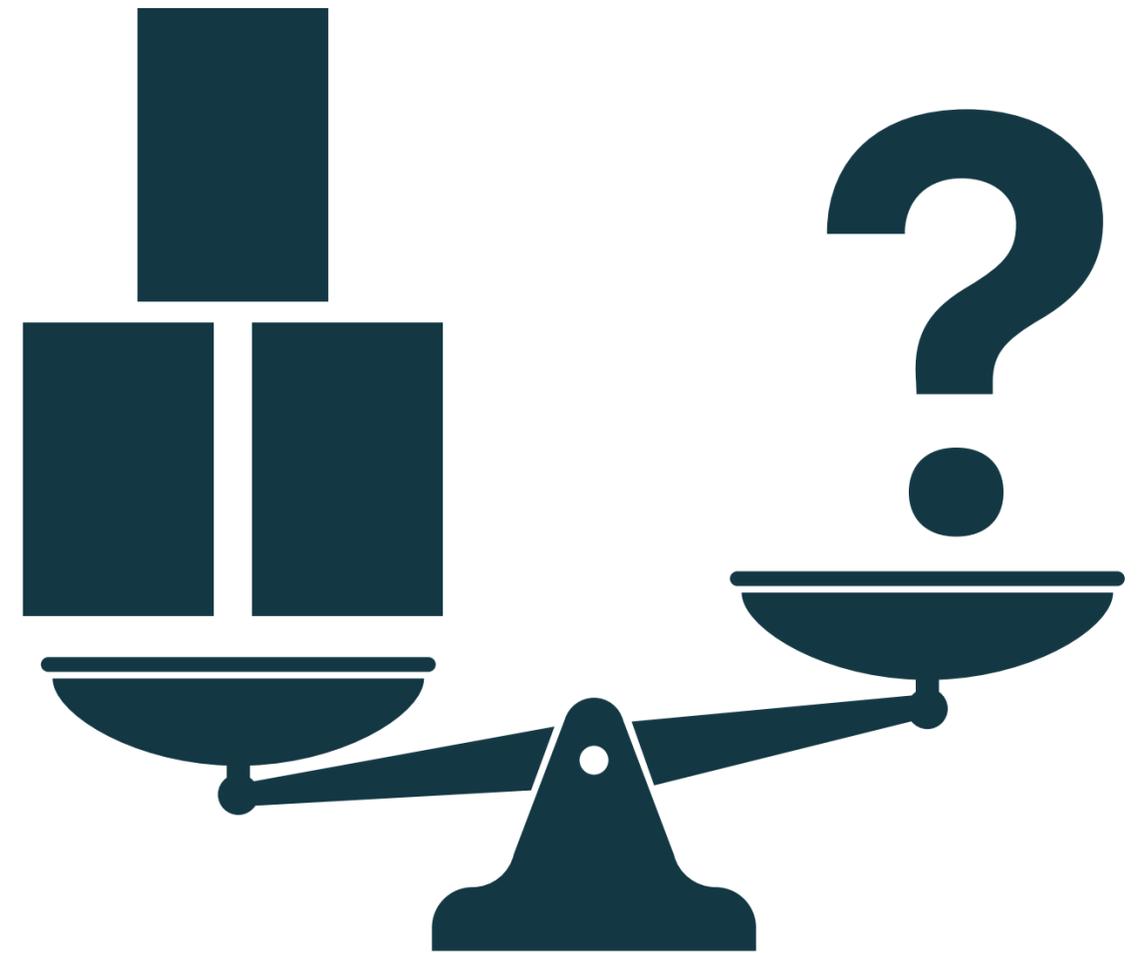
- Can you find a way to balance it?
- Extension: How many ways can you find to balance it?



# NET ZERO BALANCE

Pick 3 CO<sub>2</sub> source cards from random

- Can you find a way to balance it?
- Extension: How many ways can you find to balance it?



# REFLECTION

- What are the worst for the climate?
- What are the best?
- Why do we need both big and small actions to reach net zero?



A stylized graphic of a globe, split into two colors: a teal/cyan color for the upper half and a light green color for the lower half. The globe is centered and occupies most of the frame.

# **FACT OR FICTION**

GAME 1

# FACT OR FICTION

For this game, you have to guess whether you think that the statement is true or false.



**If you cut down a tree, planting a new one is just as good, straight away**

8



# DISCUSSION

- Which statement surprised you the most?
- How could you help someone else understand the right answer?



A stylized graphic of a globe, split into two colors: a teal/cyan color for the upper half and a light green color for the lower half. The globe is centered and occupies most of the frame.

# **FACT OR FICTION**

GAME 2

# POSTER

Pick one statement and make a poster to help others understand it

Example:

 **Q**

**If you cut down a tree, planting a new one is just as good, straight away**

8

*Cutting Down Trees*

**WHY PLANTING A NEW ONE ISN'T ENOUGH!**

Old trees store more carbon because they've grown for many years.

New trees are small and take a long time to catch up.

**What can we do?**

1. **Protect old trees and forests.**
2. **Plant new trees and help them grow**

Your poster should have:

1. A big heading
2. A picture
3. **Extension:** Some writing to explain the right answer. 2-3 short sentences is enough.

# SHOW AND EXPLAIN YOUR POSTER!



*Cutting Down Trees*  
**WHY PLANTING A NEW ONE ISN'T ENOUGH!**

Old trees store more carbon because they've grown for many years.

New trees are small and take a long time to catch up.

**What can we do?**

1. **Protect old trees and forests.**
2. **Plant new trees and help them grow**

An infographic with a light green background. It features a large green tree on the left and a smaller green tree on the right. There are white clouds in the sky. The text is arranged in a clear, readable layout with callout boxes for key facts and a list of actions at the bottom.

A stylized, abstract representation of a globe, composed of irregular, organic shapes in shades of teal and light green. The shapes are layered and overlapping, creating a sense of depth and movement. The overall effect is a modern, graphic take on the Earth's continents and oceans.

# **FACT OR FICTION**

GAME 3

# SOCIAL MEDIA

Pick one statement and make a social media post to help others understand it

## Example:

 **Q**

**If you cut down a tree, planting a new one is just as good, straight away**

8



Your post should have:

1. A big heading
2. A picture
3. **Extension:** Some writing to explain the right answer. 2-3 short sentences is enough.

# SHOW AND EXPLAIN YOUR POST!

