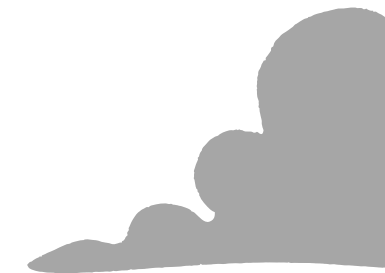




# RACE TO NET ZERO



# 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



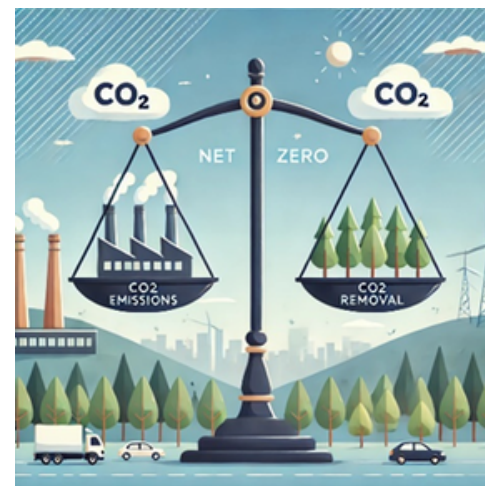
D



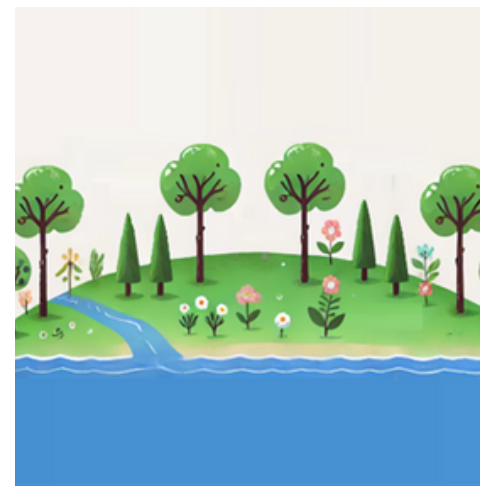
E



F



G



H





**ANSWERS**



# NET ZERO STORY

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

H



C



E



D



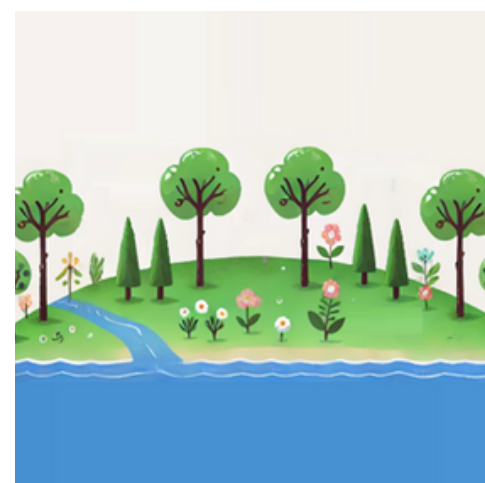
B



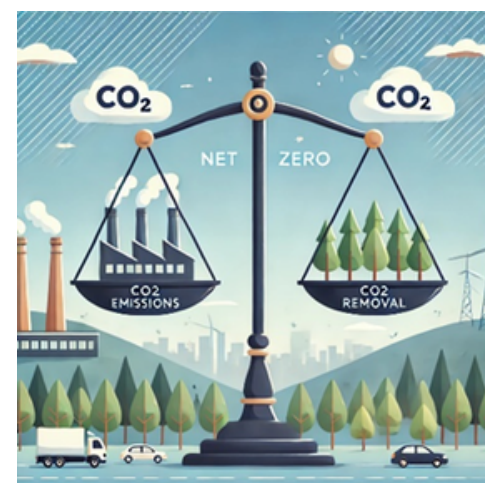
A



G



F



A stylized, abstract representation of the Earth's surface, featuring organic, flowing shapes in shades of teal and light green. The shapes are layered, creating a sense of depth and movement, reminiscent of a topographic map or a fluid simulation.

# **SOURCES AND SINKS**

# SOURCES AND SINKS

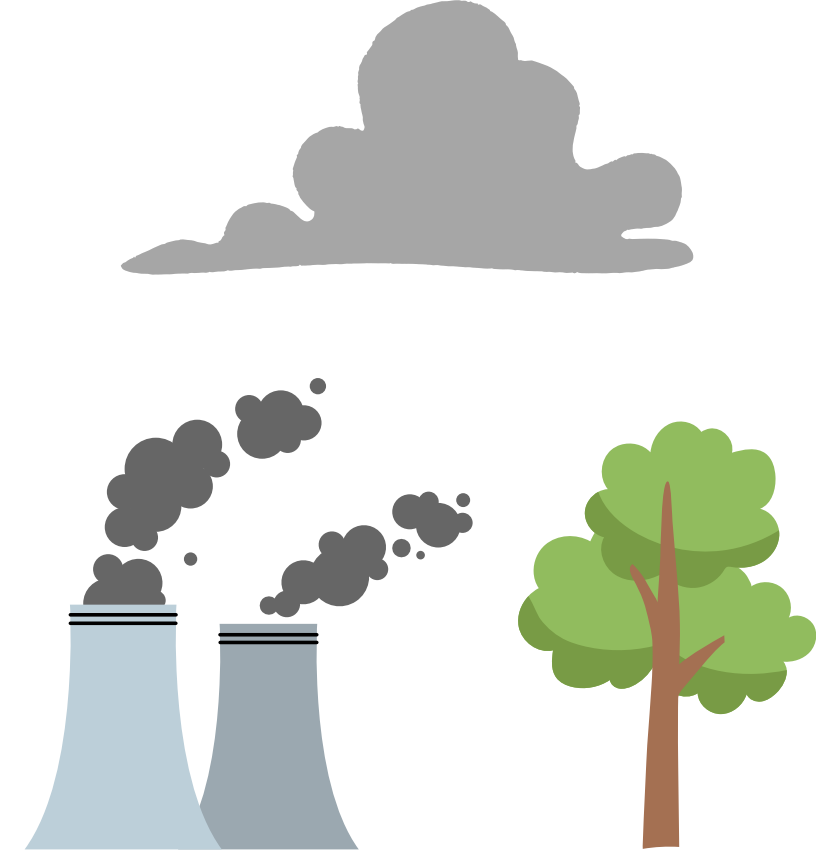
Sort the cards into 2 groups:

## 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

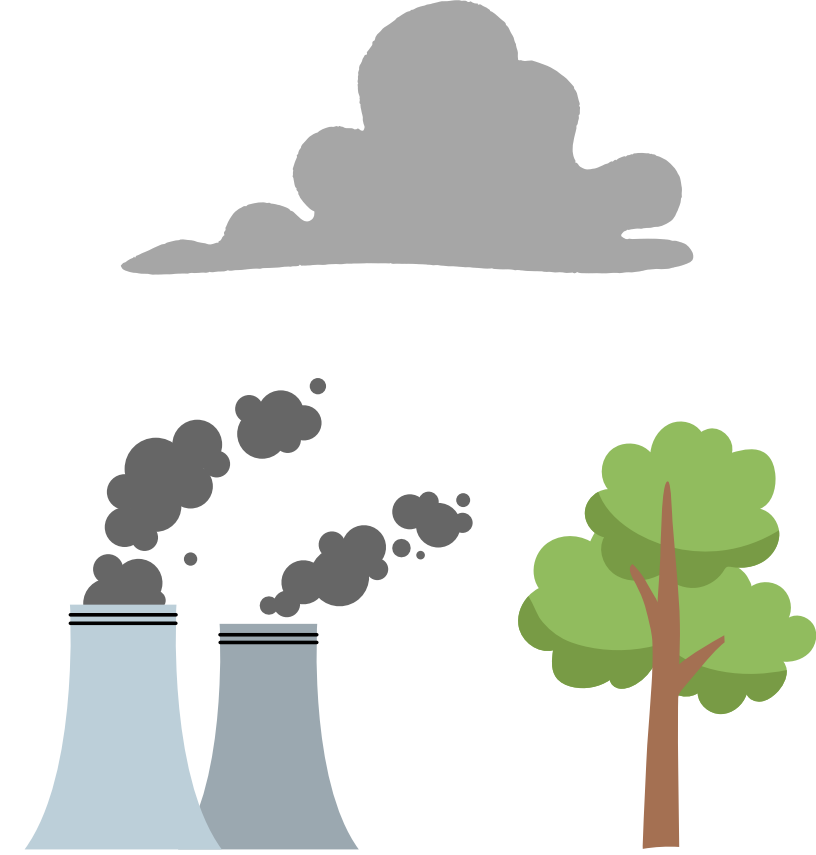
Sort the cards into 2 groups:

## 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



**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:


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

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.	

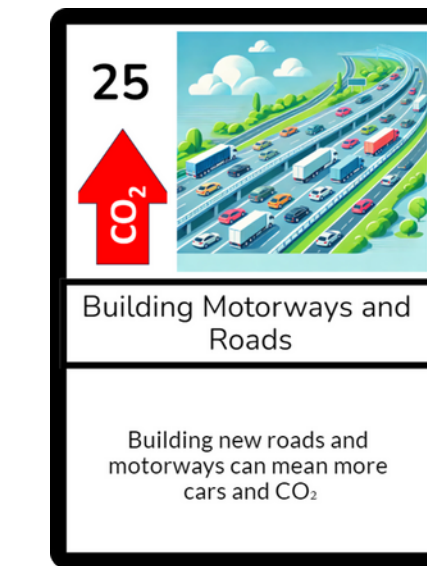
$$30 + 4 = 34$$



# NET ZERO BALANCE

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

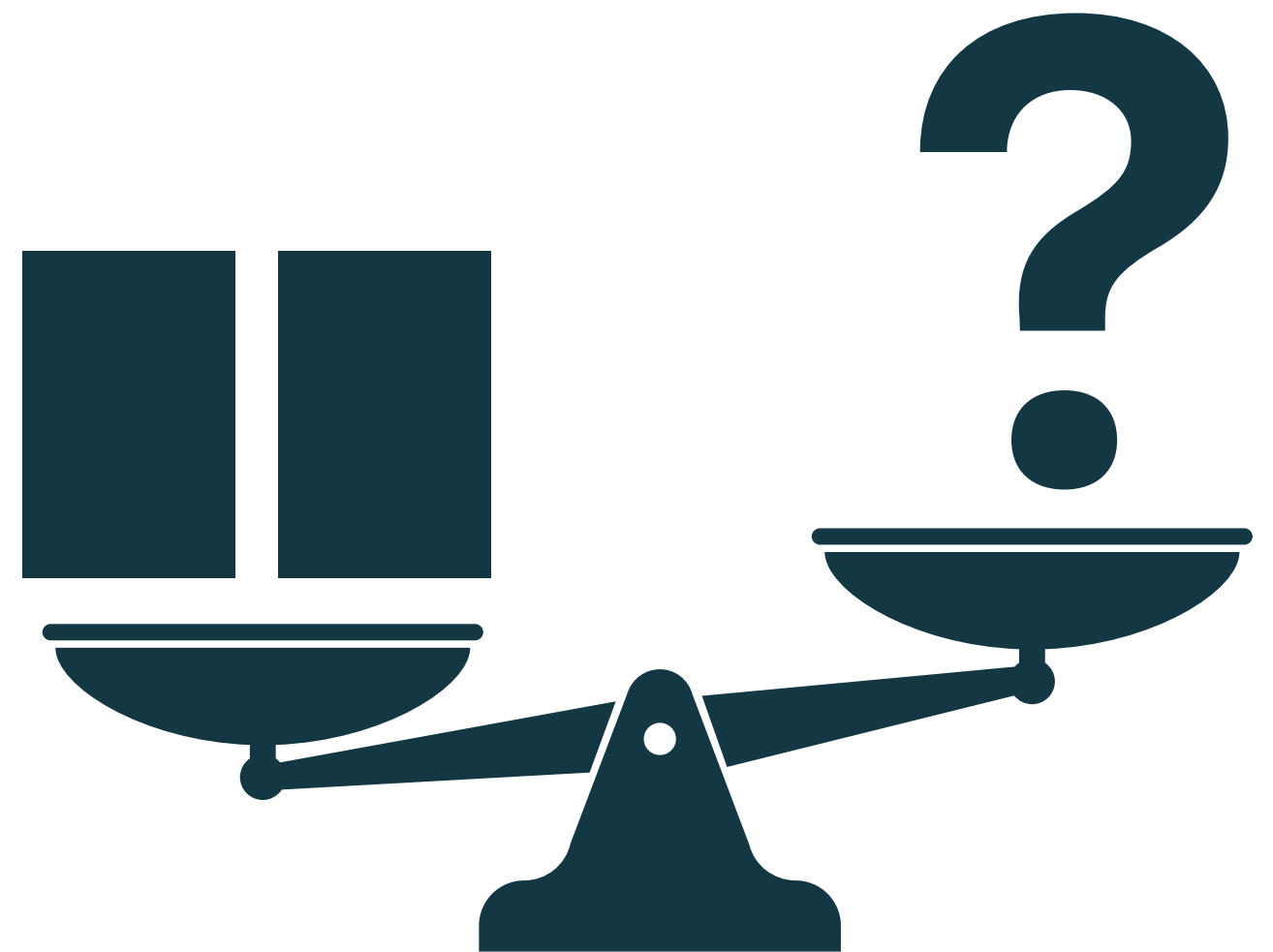
- Can you balance it with 1 card?
- Can you balance it using more than 1 card?
- Extension: How many ways can you find to balance it?



# NET ZERO BALANCE

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

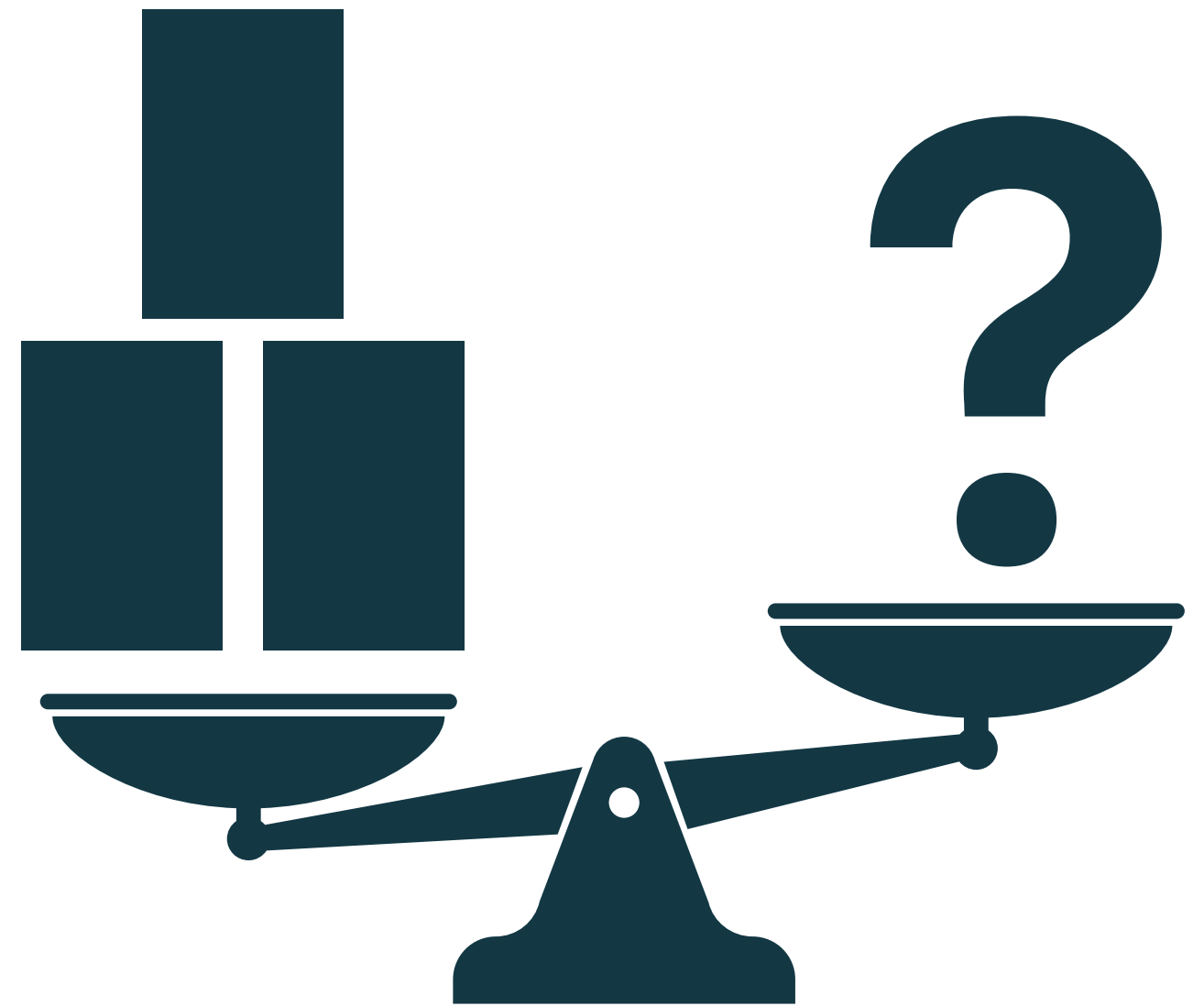
- Can you find a way to balance it?
- Extension: How many ways can you find to balance it?



# 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?







# 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.

Q

**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?





# FACT OR FICTION


GAME 2



# POSTER

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

**Example:**



**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!





# 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.

A stylized illustration of the Earth, showing green continents and blue oceans, positioned on the left side of the image.

# SHOW AND EXPLAIN YOUR POST!

