



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



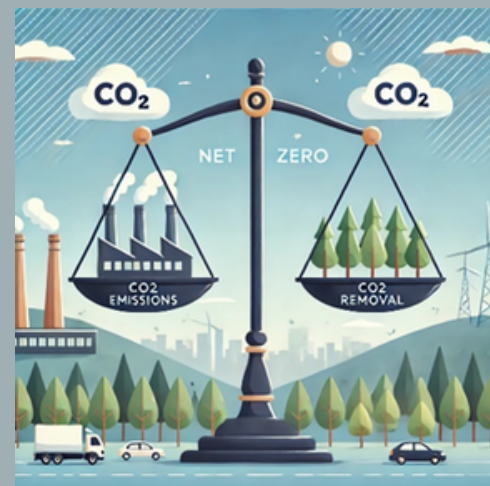
D



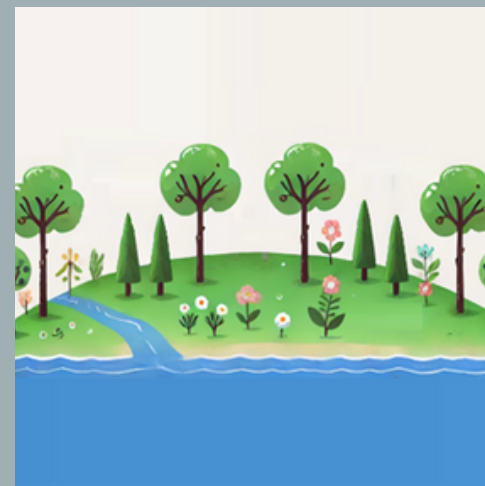
E



F



G



H





ANSWERS

NET ZERO STORY

EXTENSION: Take turns to tell the CO₂ to another person

H



C



E



D



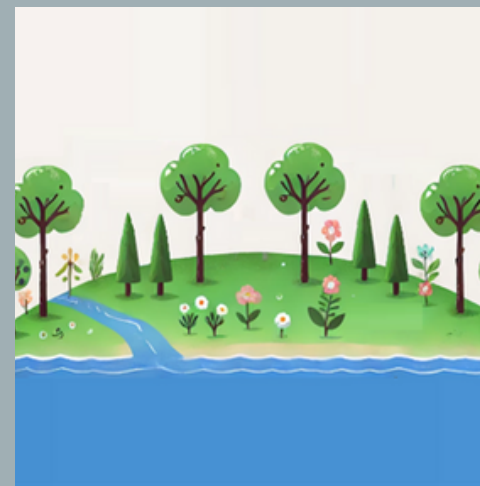
B



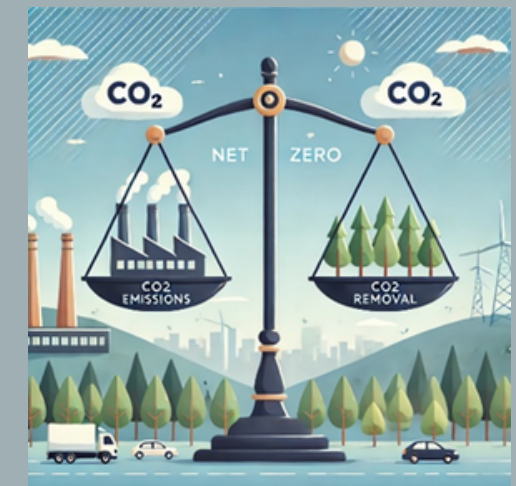
A



G



F



A stylized illustration of the Earth, showing continents in light green and oceans in teal. The Earth is centered in the background, with the title text overlaid on it.

SOURCES AND SINKS

SOURCES AND SINKS

Sort the cards into 2 groups:

Sources:

- Things that make Carbon Dioxide (CO₂)
- These are **RED**
- They are bad for the Climate

Sinks:

- Things that absorb Carbon Dioxide (CO₂), 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 (CO₂) there is
- These have a big arrow

Small Actions:

- Things that individuals do that make a little difference to how much Carbon Dioxide (CO₂) 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 illustration of the Earth, showing continents in light green and oceans in teal. The Earth is positioned in the lower half of the frame, with a dark teal background above it.

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 CO₂

3





Buying Lots of New Toys and things

Making toys and transporting them to shops uses energy and adds CO₂.

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 CO₂.

3





Buying Lots of New Toys and things

Making toys and transporting them to shops uses energy and adds CO₂.

$$25 + 3 = 28$$

-30



Building More Wind Farms

Wind farms create clean energy that doesn't add CO₂.

-4



Your family using public transport

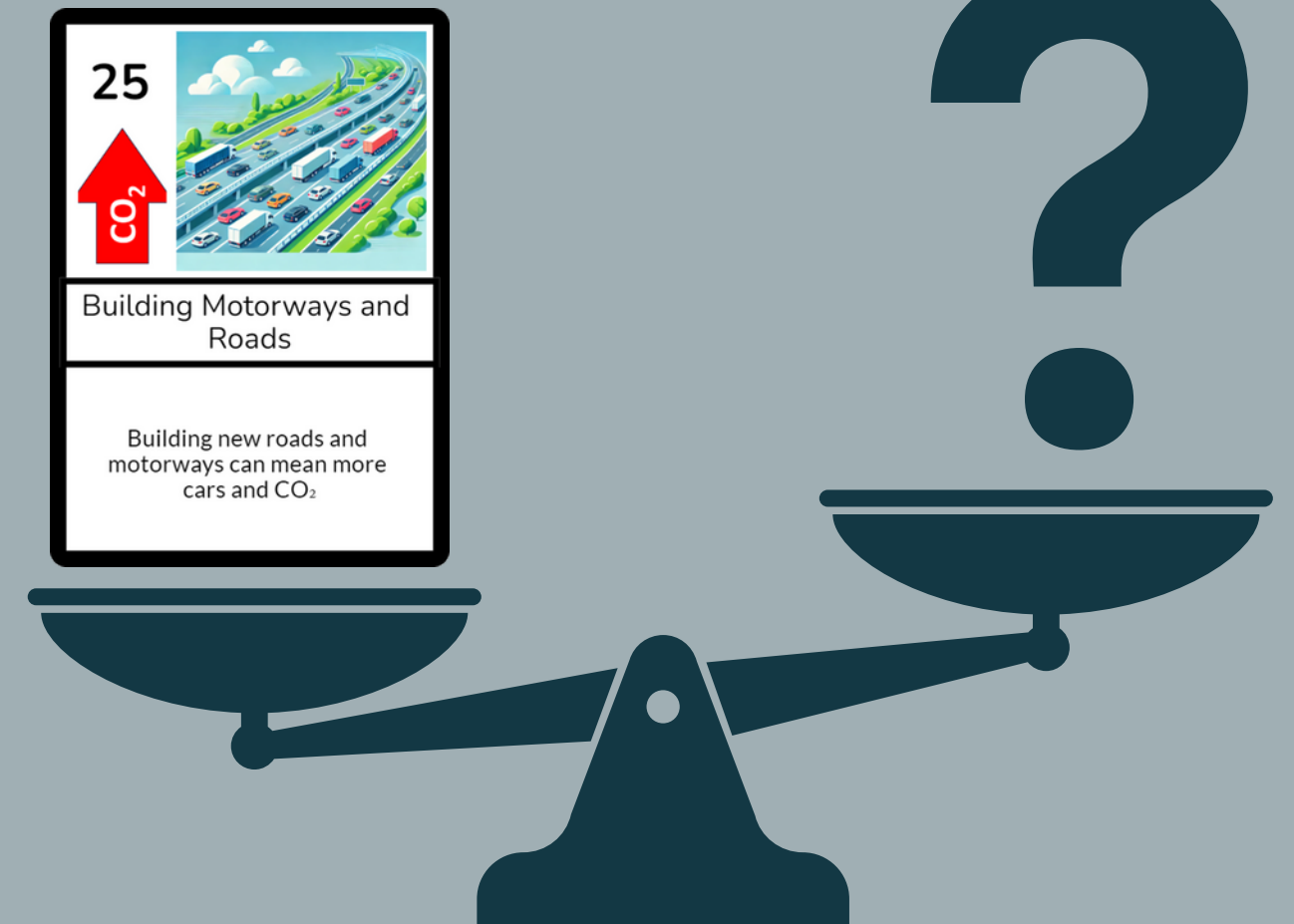
Taking a bus or train instead of a car helps cut down on CO₂ and is better for the environment.

$$30 + 4 = 34$$

NET ZERO BALANCE

Find a way to balance the CO₂ source cards using the CO₂ 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 CO₂ 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 CO₂ 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.

SHOW AND EXPLAIN YOUR POST!

