



# What is CO<sub>2</sub>?



# Do you think you have the right to Clean Air?



YES – I think I have a right because...

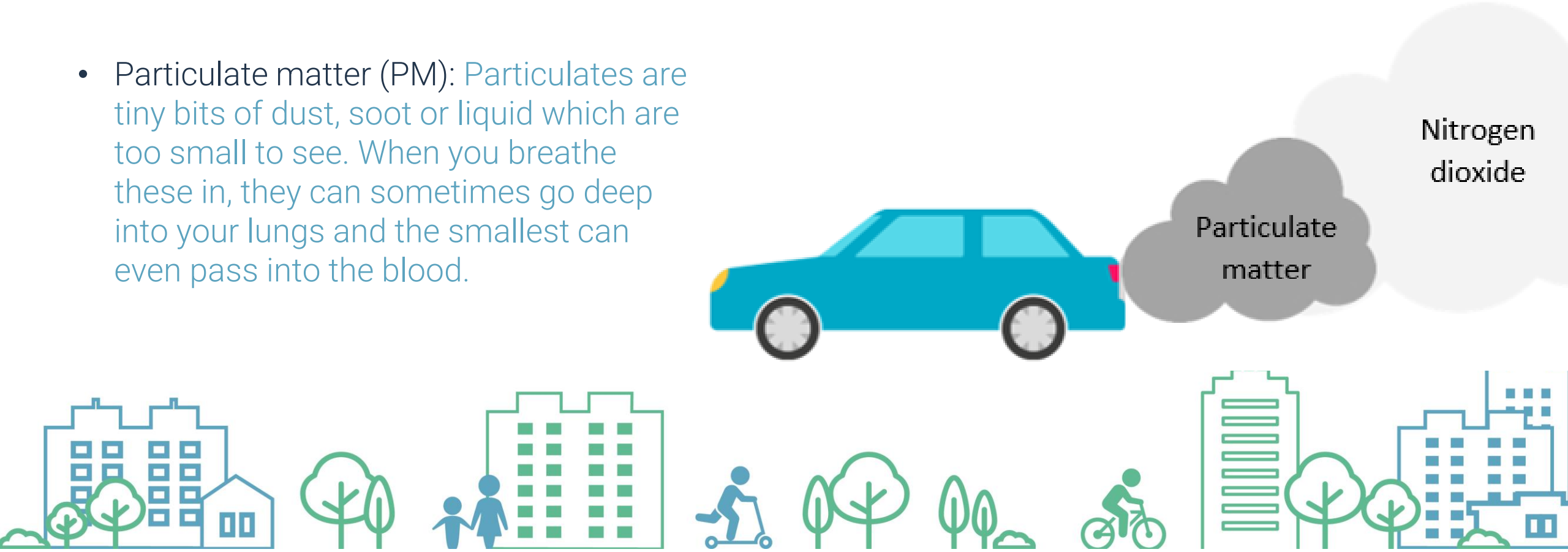
NO – I don't think I have a right because...

UNSURE – I feel unsure because...



# What is polluting your air?

- Nitrogen dioxide (NO<sub>2</sub>): breathing this in can be bad for your lungs. You can't see or smell this gas in the air, except in very warm weather when it sometimes combines with other things in the air and makes the sky look hazy and brown.
- Particulate matter (PM): Particulates are tiny bits of dust, soot or liquid which are too small to see. When you breathe these in, they can sometimes go deep into your lungs and the smallest can even pass into the blood.



# What is polluting your air?

- Carbon Dioxide (CO<sub>2</sub>):

CO<sub>2</sub> is another gas which you can't see or smell. Indoors, CO<sub>2</sub> can build up during the day as we breathe out more CO<sub>2</sub> than we breathe in. This can make us sleepy and find it difficult to concentrate.

Schools are now monitoring CO<sub>2</sub> in classrooms as high levels mean that the room needs more ventilation. This brings in fresh air and reduces the amount of CO<sub>2</sub> in the room. It also reduces the risk of catching viruses like Covid-19.

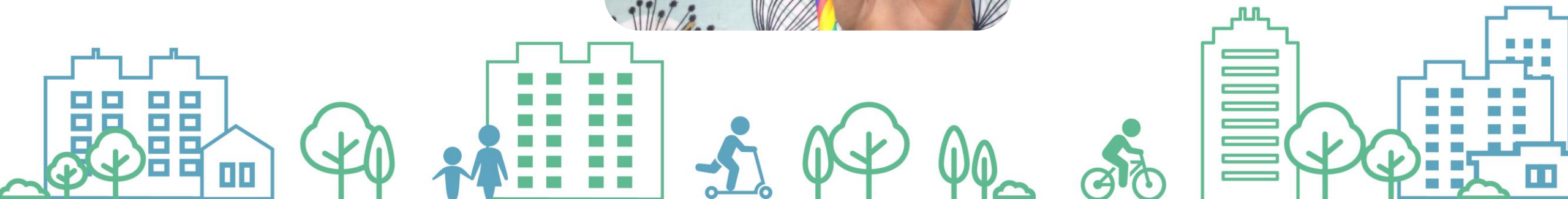
- Volatile Organic Compounds (VOCs):

VOCs are chemicals that mix in the air. They can come from things like glue, paint, aerosols or sprays and cleaning products. They can affect your lungs and make breathing difficult.



# What does it feel like to breathe in dirty air?

Try the 'Breathing through a straw' experiment to see



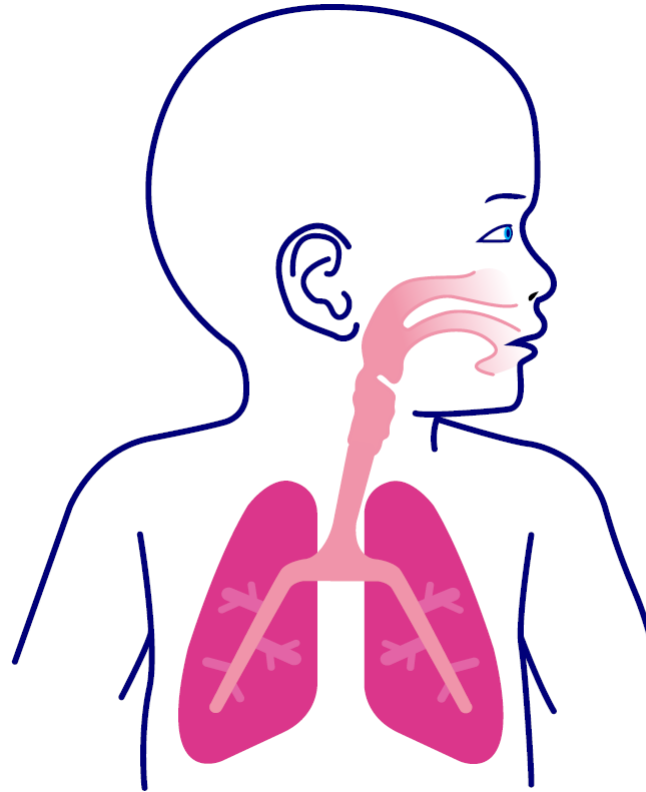


# What does air pollution do to our bodies?

It can make your asthma worse

It can make you catch infections more easily

*How many children have asthma in your class?*



It can make you feel dizzy

It can make your eyes itch

It can make you cough, splutter, wheeze and sneeze



In the UK, 1.1 million children are being treated for asthma: that's one out of every 11 children.





Many of our schools were built by our Victorian ancestors in a time when being on a main road was a good thing.

But now those same buildings are on the busiest roads.

This means that over 2,000 schools and nurseries in England and Wales are within 150 metres of a road with illegal levels of air pollution.





# How do you travel to school?

Which journey to school do you think makes you breathe in the most polluted air?

- Cycling on a busy route
- Cycling on a quiet route
- Travelling by car
- Walking/scooting on a quiet route
- Walking/scooting on a busy route
- Travelling by bus/public transport



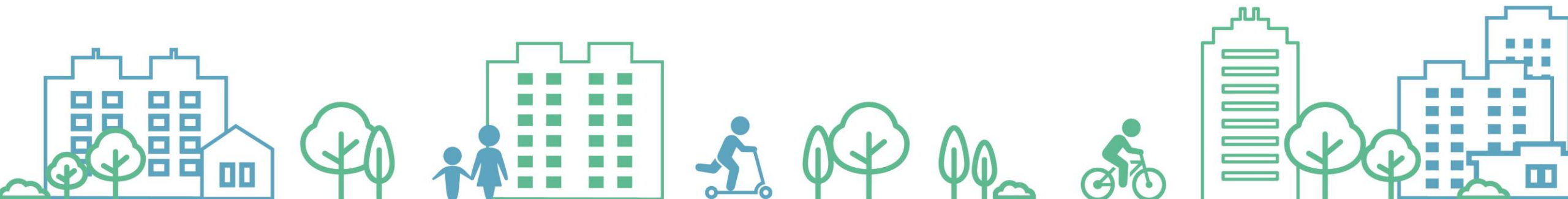
# Answers!

1. Travelling by car
2. Travelling by bus/public transport
3. Walking/scooting on a busy route
4. Cycling on a busy route
5. Cycling on a quiet route
6. Walking/scooting on a quiet route





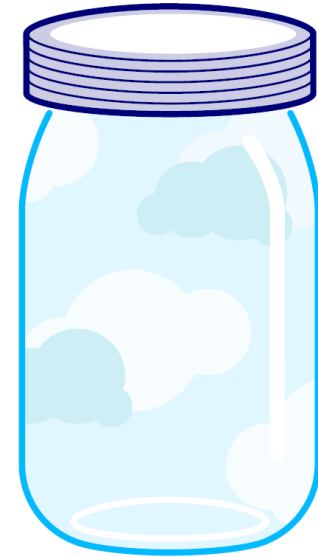
People in cars breathe in double the air pollution of people walking on the same busy route.



# Clean Air Ambassador's Talking Circle

How can WE help lower the Air Pollution around our school?

- What differences do we want to make?
- Who might we need to persuade to join in?
- What actions might we take?

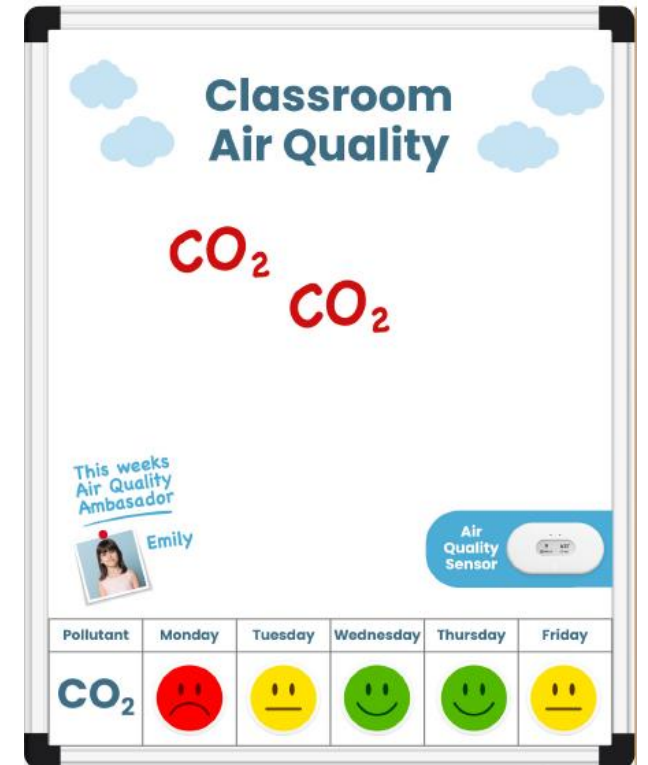




# Class Clean Air Ambassadors

Monitoring indoor air quality is important so we can see what's in the air we breathe and take ACTION!

- Throughout the day check CO<sub>2</sub> levels using the classroom air quality monitor
- Place an emoji on the board to record what the CO<sub>2</sub> level is
- When CO<sub>2</sub> levels are high (above 800ppm), ask your teacher to open the door and windows
- See how long it takes for CO<sub>2</sub> to fall back to a healthy level when you open the door and windows– make a note of this on the board



# How can we reduce pollution outside school

1. Fit and Fun Ways to Travel
2. Parking
3. Engine Switch-off
4. Clean School Deliveries
5. Quiet Routes

Which campaign would work best with your school community?  
Choose one to start your own Clean Air Campaign for your school.

