Clean Air Day Assembly Guide Script

1. Decide who will present each slide and mark the text with a forward slash / for pauses and underline words or phrases to emphasise.
2. Write in the name(s) of the students presenting each slide.
3. Feel free to make your own amendments to the slide and script.
4. Rehearse with the PowerPoint until you are confident to present!

Slide and student(s) presenting	GUIDE SCRIPT
2	• Good Morning everyone, we are the TfL Explorers Ambassadors and we are working with Transport for London to deliver a special project. We'll be helping you to think differently about how simple changes to the way we travel can make our city a healthier and greener place to live. • The World Health Organisation recognises that air pollution is the largest environmental health risk we face today. However, there are many things we can do, both as individuals and as a community, to reduce our emissions and set the course for a brighter future.
3	• London is an amazing city, with a population of over 9 million people! We are lucky to have one of the greatest transport networks in the world, giving us many options for getting around. • However, like most UK cities, London suffers from traffic related pollution. The sheer size of the city, along with a dense road network and tall buildings all contribute to the problem. Pollution can build up when it becomes trapped between buildings, especially during still weather.
4	• Climate change, Green energy and Net Zero are all over the news and media these days and for good reason! We are at a climate crossroads and have important choices to make. • As we better understand the impact of our behaviour on the environment, more and more people are taking action, not only to save the planet, but to contribute to a fairer, more equal and supportive society.

5	So why is Air Quality important? If pollution is in the air that we breathe, particles and gases enter our bodies, which can damage our health and physical and mental development. • Exposure to air pollution can affect your brain, your ability to learn and your mental health. • Air pollution can damage your lungs. It can impact your breathing, cause respiratory diseases, such as asthma, or it can make symptoms worse. • Breathing in air pollution can affect heart health and can cause future heart problems. Every year, it's estimated to contribute towards thousands of deaths in the UK. • In summary, Air pollution affects peoples' health and the health of all living things on Earth, so we need to take positive action!
6	**Can you see air pollution? Not always!** • Obvious signs include exhaust clouds and smog, but air carries some tiny tiny particles called particulate matter, or PM, which we cannot see. • Some particles, known as PM10, are 10 times smaller than a grain of sand!
7	However, nature provides us with some natural bio-indicators of air quality which can be found wherever you are in the world! Have you ever noticed these alien looking plant-like organisms growing on a tree, fence or brick wall? **Meet the Lichens!** • Lichens are two organisms living together in harmony: a fungus and an alga. • They evolved about 250 million years ago and are good indicators of air quality! • There are many different types of lichen that come in all shapes, sizes and colours. Different types of lichen react differently to NO2 (Nitrogen Dioxide) - a pollutant commonly found in the air around roads. • **Nitrogen loving lichens** are often orangey-yellow, like 'Cushion Xanthoria' whereas **Nitrogen sensitive Lichens** are often green and leafy such as 'Usnea'.

8	When you're out and about around school or in the local area, look out for these amazing bio-indicators! • These Nitrogen-loving lichens thrive in dirty air where NO2 is present • These Nitrogen-sensitive lichens can only live in clean air without NO2 so can be harder to find in cities!
9	**We have devised a quick quiz to test your knowledge on Air Quality!**
10	1. **When a vehicle is idling, the engine is still running and burning fuel, which creates air pollution hotspots.** (Hands up for true. Hands up for false). It's true. 2. **Air quality inside a bus or car is better than for cyclists and pedestrians on the street.** (Hands up for true. Hands up for false). Surprisingly it's false! The air is actually better outside vehicles where it can circulate more and pollutants are less concentrated. 3. **Higher rates of air pollutants have been found during the afternoon school pick up time.** (Hands up for true. Hands up for false). It's true, so let's see what we can do to reduce this! 4. **Stopping vehicles from idling can reduce high levels of air pollution by 20 to 30%.** (Hands up for true. Hands up for false). It's true. Switching off the engine not only reduces emissions but saves on fuel costs too!
11	**A carbon footprint** is a measure of the amount of carbon dioxide released into the atmosphere as a result of the activities of a particular individual, organisation, or community. It is possible to calculate the carbon footprint of travelling to school. Here are the CO2 emissions per passenger kilometre of 4 transport modes: 1. **The average of a medium petrol or diesel car** is 181.5g. If that doesn't sound like a lot, remember that CO2 is a gas, so there has to be a lot of it to produce any weight! 2. **For a London bus**, emissions are 75g per passenger. London now has over 1000 zero emission buses with many electric, hybrid and hydrogen buses now in service! 3. **The average across the Underground and suburban trains** is 30g. 4. **Walking and cycling are of course emission free!** Although there will always be limitations to these calculations, they can provide us with a good indication of how our travel choices impact the environment.

12	**What is missing from these photos? Can you imagine a street without cars?** • Sometimes a car journey might be necessary, especially if you have mobility needs but for many of us, there are steps we can take to reduce our reliance on motorised vehicles. • According to a recent UK survey, 90% of people now report doing at least one thing to help reduce outdoor air pollution. So how can you take action on air?
13	Clean Air Day is an opportunity to re-consider how we get around and here are 4 easy ways to make your journey more Eco-friendly and more active: • **WALK WITH FRIENDS** - Meet up with friends and walk together. It's fun, sociable and healthy! Start your day feeling energised! You could be saving over 400 grams of carbon emissions! • **PARK & STRIDE** - Add a 10 minute walk to your journey. You can get some free exercise and reduce your carbon footprint in the process! • **BIKE IT!** Dust off your bike and try cycling or plan a bike ride at the weekend! • **IDLING** – Ask your parents and adults to switch off when they stop. Leaving the engine running creates 20 times more pollution than driving at 30mph. Save money and save the planet!
14	**And here's an idea for getting a clean air boost yourself!** • We are lucky to live in one of the greenest cities in the world with over 3,000 parks and green spaces! These are an important refuge where we can escape from city life with fresh air, wildlife and beautiful views. • There are many benefits of breathing clean air including clearer skin, better digestion and better sleep. The famous writer Charles Dickens, once described Hampstead Heath as being the 'lungs of London'. Where is your favourite green retreat?

15	• To breathe clean air every day we need to make changes: travelling more actively and sustainably, avoiding unnecessary car journeys, slashing industrial emissions and not buying products that cause pollution in our homes. • To see change on a large scale requires us to work as a movement, with changemakers across the country, putting pressure on major polluters and being that change we want to see ourselves, with our own actions! • In a recent UK survey, around 8 in 10 people (82%) agreed that if everyone did their bit, we could reduce the effects of climate change. • This Clean Air Day, please make a pledge of something you will do to help clean the air!
16	Thank you for listening. Together, we can all tackle air pollution and make a difference!

Data references:

Leading Greener Lives 2019 and Census 2021, Office for National Statistics
www.ons.gov.uk

Action for Clean Air, 2023
www.actionforcleanair.org.uk

World Health Organization
www.who.int/health-topics/air-pollution