AIR POLLUTION – KEY

1 Answer the following questions in your own words.

1. Name some natural causes of air pollution. **volcanic eruptions, wild fires, forest fires, dust storms**
2. In which ways do humans cause air pollution? **traffic, burning of fossil fuels, factories, mining, chemical industries, waste treatment, smoking**
3. What is our atmosphere made up of? **78% nitrogen and 21 % oxygen**
4. When and where did air pollution, as we know it today, start? **beginning of the 19th century during the Industrial Revolution in Europe**
5. Look at the map on page 1. Which countries or areas have the most deaths from air pollution? **Central Africa, India, China**
6. What is carbon monoxide and where can you find it? **colorless gas , when coal or wood is not completely burned, in cigarettes**
7. Why are CFCs so dangerous? **they rise into the atmosphere and destroy the ozone layer**
8. Why do we need natural ozone in the atmosphere? **to protect us from the sun's harmful rays**
9. What does nitrogen oxide cause? **smog and acid rain**
10. What does acid rain lead to? How does it affect us? **destruction of forests, soil, buildings, health problems**
11. Why don't we always know where acid rain comes from? **it can travel far away from the place where it originates**
12. Name a few things that you can do to help stop air pollution? **walk or use a bike, car pools, don't use spray cans, plant more trees, switch off lights, don't overheat rooms**
13. What does the word smog mean? **smoke and fog**
14. Why was smog a big problem in London? **lots of fog, people used coal to heat homes, not much wind**
15. Which cities have smog problems today? **cities in subtropical climate zones with a lot of traffic – Mexico City, Cairo**

AIR POLLUTION – KEY

2 **Match the words on the left with the definitions on the right.**

A	air conditioning		**E**	dry powder that is made up of small particles of dirt
B	pollution		**L**	material like gas, oil or coal that can be burned to get energy
C	confused		**F**	when a volcano sends out lava and gases
D	decade		**N**	line of light that comes from the sun
E	dust		**B**	all the things that make our environment dirty
F	eruption		**H**	to set free
G	nitrogen		**P**	everything that comes from the sun
H	release		**J**	a machine with a motor in it, used to transport people and goods
I	soil		**A**	a system that makes the air in a building or in a car cooler
J	vehicle		**M**	gray metal that melts easily and is very poisonous
K	cancer		**G**	a colorless gas that makes up most of the Earth's atmosphere
L	fuel		**O**	group of people who travel to work together in one car
M	lead		**R**	everything that comes from the waves of the ocean
N	ray		**Q**	to make something too hot
O	carpool		**I**	the top part of the Earth on which plants grow
P	solar		**D**	a period of ten years
Q	overheat		**K**	a very dangerous disease in which cells in the body start to grow in an uncontrolled way
R	tidal		**C**	if you can't think clearly or don't know what's happening

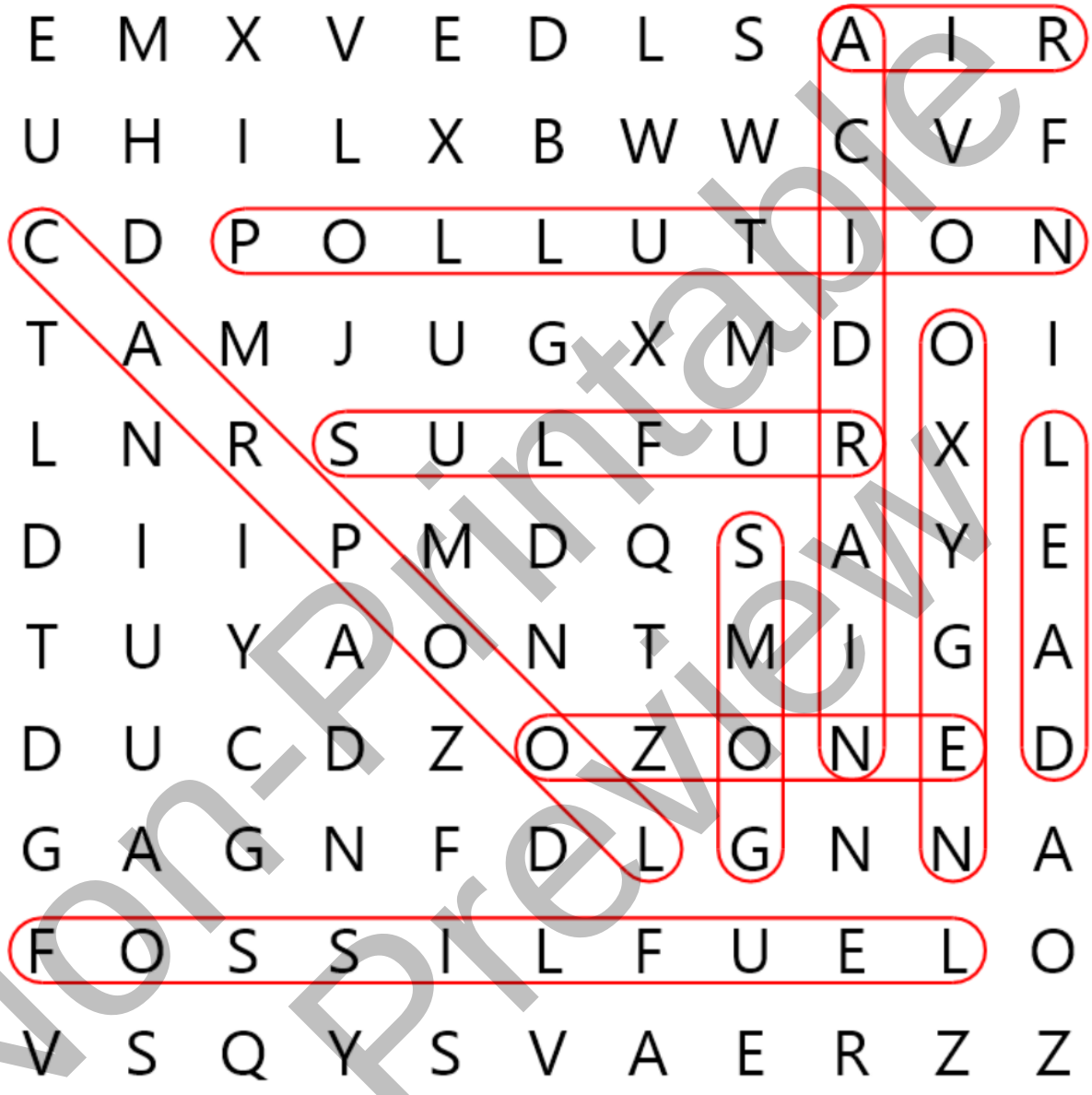
AIR POLLUTION – KEY

3 **Match the beginnings of the sentences with the sentence endings. There are TWO endings you will not need.**

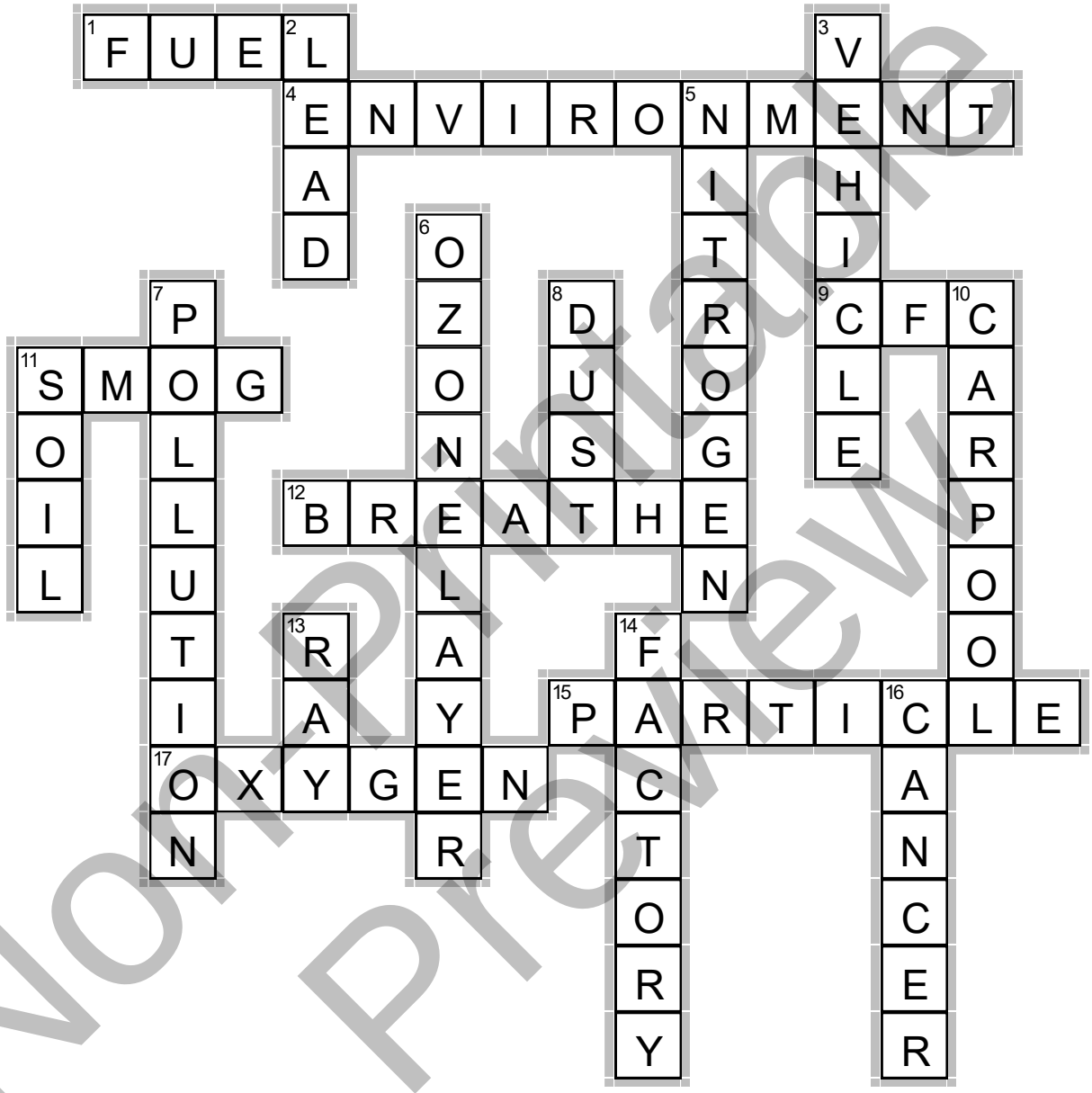
A	The first signs of air pollution		**F**	that destroy the ozone layer
B	The air we breathe is made up of		**C**	has become a major problem for our environment
C	In the last few decades air pollution			air pollution in Great Britain has risen
D	Even though most air pollution is created by humans		**A**	go back to the 19th century
E	Carbon monoxide is a colorless gas		**H**	because of acid rain
F	CFCs are gases		**L**	can help keep our environment clean
G	Older people and children should not go outdoors			by producing more carbon dioxide
H	Buildings corrode and soil can be destroyed		**J**	because they produce oxygen and absorb carbon dioxide
I	We can help limit air pollution		**B**	78% nitrogen and 21% oxygen
J	We should preserve trees and forests		**K**	produce smog
K	Dirt particles and fog on the ground		**G**	when there is too much ground ozone in the air
L	Organizing car pools or using public transport		**D**	it can also have natural causes
			E	that makes us confused and tired
			I	by using cleaner forms of energy

AIR POLLUTION – KEY

4 **Look for 10 words about air pollution (➔🡐🡖🡗🡓) and mark them.**



5 Crossword



6 **Smog - Complete the text with the words from the box. There are more words you will not need.**

The word “smog” means smoke and **(1)** **fog** . When you burn **(2)** **coal** or oil gases are produced. These gases combine with fog on the **(3)** **ground** . When the sun shines , dangerous **(4)** **particles** are formed in the air.

Especially in the **(5)** **summertime** , when temperatures are very high, smog stays near the ground and because of it some people can’t **(6)** **breathe** very well.

Smog first occured in Great Britain during the beginning of the **(7)** **Industrial Revolution** . At that time people burned a lot of coal and in **(8)** **factories** iron and **(9)** **steel** was produced. The **(10)** **population** of cities like London **(11)** **suffered** from smog and many people died.

Today, cities in **(12)** **subtropical** regions have the most problems with smog—Los Angeles or Mexico City have a lot of **(13)** **traffic** and a lot of sunshine in the summer.

We try to do things to **(14)** **prevent** smog. Some cities don't allow cars into the downtown areas on smog days and factories use coal without **(15)** **sulfur** .

area
breathe
coal
discovered
factories
fog
ground
Industrial Revolution
occurs
particles
population
prevent
steel
subtropical
suffered
sulfur
summertime
traffic

7 **The Great Smog of London. Find 13 words that shouldn't be in the text and mark them.**

The Great Smog of London **has** started on December 5, 1952 and lasted almost a whole week. It was one of the **hardly** deadliest events that Britain experienced in the last century. Between 4,000 and 10,000 people died as a direct result of the smog and more than 100,000 Londoners suffered **themselves** from lung-related illnesses.

Smog had always been a problem in Britain's capital, ever **for** since the days of the Industrial Revolution. At the beginning of December of 1952, a period of very cold weather hit **at** London. In addition **also** , heavy fog spread across the city. Coal was **never** used to heat homes, so people burned more and more to keep warm. Pollutants coming out of chimneys and factories stayed near the surface **water** and mixed with the fog because there was no **heavy** wind that would blow them away.

Traffic in those **happy** days came to a standstill. Ambulances could not get sick people to hospitals. People couldn't see very far **away**. Sometimes the smog was so thick you couldn't even see your own feet. The poisonous air came into houses through cracks in the walls.

As a result of the Great Smog, **because** the city's government passed strict pollution laws. Even though smog stayed a problem for years to come, the air quality of London slowly improved **itself**.

Nelson's Column during the Great Smog of 1952

AIR POLLUTION – KEY

8 **Complete this information table. Write down the main pollutants, where you can find them and what they lead to.**

POLLUTANT	WHERE THEY ARE IN	WHAT THEY CAUSE
carbon monoxide	burn wood, petrol, coal cigarettes	makes us confused, sleepy
carbon dioxide	burn coal, oil or wood	greenhouse gases
CFCs	air conditioning systems, refrigerators, spray cans	destroy the ozone layer
lead	paint, batteries, other products	health problems, cancer
ground ozone	pollutants from traffic, factories	health problems for old people and children
nitrogen oxide	burn fuels like coal, oil or gas	smog, acid rain breathing problems
sulfur dioxide	coal burned in power plants chemical industries	lung diseases