

SKIMMING

EXERCISE 1

A Traffic congestion affects people throughout the world. Traffic jams cause smog in dozens of cities across both the developed and developing world. In the US, commuters spend an average of a full working week each year sitting in traffic jams, according to the Texas Transportation Institute. While alternative ways of getting around are available, most people still choose their cars because they are looking for convenience, comfort, and privacy.

B The most promising technique for reducing city traffic is called congestion pricing, whereby cities charge a toll to enter certain parts of town at certain times of the day. In theory, if the toll is high enough, some drivers will cancel their trips or go by bus or train. And in practice it seems to work: Singapore, London, and Stockholm have reduced traffic and pollution in city centres thanks to congestion pricing.

C Another way to reduce rush hour traffic is for employers to implement flexitime, which lets employees travel to and from work at off-peak traffic times to avoid the rush hour. Those who have to travel during busy times can do their part by sharing cars. Employers can also allow more staff to telecommute (work from home) so as to keep more cars off the road altogether.

D Some urban planners still believe that the best way to ease traffic congestion is to build more roads, especially roads that can take drivers around or overcrowded city streets. But such techniques do not really keep cars off the road; they only accommodate more of them.

E Other, more forward-thinking, planners know that more and more drivers and cars are taking to the roads every day, and they are unwilling to encourage more private automobiles when public transport is so much better both for people and the environment. For this reason, the American government has decided to spend some \$7 billion on helping to increase capacity on public transport systems and upgrade them with more. But environmentalists complain that such funding is tiny compared to the \$50 billion being spent on roads and bridges.

Match the correct heading for paragraphs A-E from the list of headings below

Paragraph A	A solution which is no solution
Paragraph B	Changing working practices
Paragraph C	A global problem
Paragraph D	Not doing enough
Paragraph E	Paying to get in

EXERCISE 2

Choose the suitable heading for each paragraph.

A. The concept of traffic-free shopping areas goes back a long time. During the Middle Ages, traffic-free shopping areas known as souks were built in Middle Eastern countries to allow people to shop in comfort and, more importantly, safety. As far back as 2,000 years ago, road traffic was banned from central Rome during the day to allow for the free movement of pedestrians and was only allowed in at night when shops and markets had closed for the day.

(a) Facing local opposition

(b) An idea from ancient history

B. The modern, traffic-free shopping street was born in Europe in the 1960s, when both city populations and car ownership increased rapidly. Dirty exhaust fumes from cars and the risks involved in crossing the road were beginning to make shopping an unpleasant and dangerous experience. Many believed the time was right for experimenting with car-free streets, and shopping areas seemed the best place to start.

(a) A need for change

(b) An experiment that went wrong

C. However, research carried out afterwards in several European cities revealed some unexpected statistics. In Munich, Cologne and Hamburg, visitors to shopping areas increased by 50 percent. On Copenhagen's main shopping street, shopkeepers reported sales increases of 25-40 percent. Shopkeepers in Minneapolis, USA, were so impressed when they learnt this that they even offered to pay for the construction and maintenance costs of their own traffic-free streets.

(a) Some reasons for success

(b) North America learns from Europe

EXERCISE 3

The rainmakers

Science and technology work with nature to bring rain when and where it is needed

A Wheat farmer Gang Liu is a worried man. The annual rains have not arrived, and there is a danger that unless there is substantial rainfall soon, his annual wheat crop will fail. As he looks anxiously at the clouds which promise rain but are failing to deliver it, there is a sudden loud roar, and from fields for miles around, hundreds of small rockets are fired into the clouds. Within twenty minutes, the farms around the eastern Chinese city of Luohe are experiencing their first rain for many weeks. Gang Liu's valuable wheat has been saved, thanks to a technique known as 'cloud seeding', in which the chemical silver iodide (AgI) is introduced into clouds. This causes the tiny drops of moisture in the clouds to turn to ice. These tiny ice particles join until they become heavy enough to fall from the sky, turning into rain as they melt.

B But did cloud seeding really cause the rain in Luohe to fall, or was it just a coincidence? Experts often question whether cloud seeding actually works. It is hard to tell how effective cloud seeding actually is, they say, as it might have rained anyway, without human intervention. But this has not stopped many governments and organisations from trying. There are currently 150 weather-modifying projects taking place in more than 40 countries. Not all of them are aimed at creating rain. The Eastlund Scientific Enterprises Corporation in the USA, for example, is experimenting with firing microwaves into clouds to prevent the tornadoes which cause enormous damage to the country every year. In Russia, experiments have been carried out to make sure the sun shines during important national events.

C However, it is rainmaking that dominates the research programmes. In many of these, researchers are using trials in which some clouds are 'seeded' while others are not, and both groups are monitored. Arlen Huggins of the Desert Research Institute is leading a research project in Australia. Weather-monitoring technology is so good nowadays, he says, that we can measure clouds much more effectively, even from the inside. As a result, we now know much more about the effect humans can have on the weather. What Huggins' team has discovered so far is promising. They believe that cloud seeding does work, although there are still two years of the six-year project left to go.

D In China, where the majority of cloud-seeding operations take place, weather-modification authorities use army rockets to fire silver-iodide particles into the clouds. 39,000 staff working for the China Meteorological Administration (CMA) are equipped with 7,113 army cannons which, in 2006, were used to fire a million silver-iodide rockets into the atmosphere. This costs over \$100 million a year, although the CMA claims the results are

worth the expense. Between 1999 and 2006, they say, cloud seeding produced 250 billion metric tonnes of rain and prevented thousands of farmers from losing their crops.

E "We want to understand what makes clouds rain," says Philip Brown of the UK Meteorological office, explaining why so much time, effort and money are being invested. "But there is a more powerful economic reason. A lot of countries around the world are at risk from drought, and governments will try anything to make sure that doesn't happen, even if the scientific evidence is weak. The potential economic value is greater than the scientific value. Making it rain might allow you to keep agriculture going where, without human intervention, it might fail."

F Some people are concerned, however, that altering the weather can have negative consequences. Leonard Barrie, director of the research department at the World Meteorological Organisation in Geneva, explains why. "All areas of weather modification are still very controversial. Some people think that diverting water for irrigation benefits some people, but is a disadvantage to others. Someone in one area will get more water, but as a result, someone somewhere else could get less." His fears may be justified. Recently, the town of Zhoukou in China's Henan province accused neighbouring town Pingdingshan of 'stealing' rain from clouds that were due to pass over its own farms, prompting what may be the world's very first documented incident of 'rain rage'.

Choose the correct heading for paragraphs A-E from the list of headings below

List of headings

- I. Making peaceful use of a military weapon
- II. How modifying the weather has changed the world
- III. What is prompting this research?
- IV. A period of drought comes to an end
- V. An old solution to a new problem
- VI. Winners and losers
- VII. Tests provide encouraging results
- VIII. A waste of money
- IX. Global attempts to change the weather

Paragraph A

Paragraph B

Paragraph C

Paragraph D

Paragraph E

Paragraph F

EXERCISE 4

The burden of thirst

Millions of women carry water long distances. If they had a tap by their door, whole societies would be transformed.

A Aylito Binayo's feet know the mountain. Even at four in the morning, she can run down the rocks to the river by starlight alone and climb the steep mountain back up to her village with a container of water on her back. She has made this journey three times a day since she was a small child.

So has every other woman in her village of Foro, in the Konso district of south-western Ethiopia in Africa. Binayo left school when she was eight years old, in part because she had to help her mother fetch water from the Toiro River. The water is unsafe to drink; every year that the drought continues, the river carries less water, and its flow is reduced. But it is the only water Foro has ever had.

B In developed parts of the world, people turn on a tap and out pours abundant, clean water. Yet nearly 900 million people in the world have no access to clean water. Furthermore, 2.5 billion people have no safe way to get rid of human waste. Polluted water and lack of proper hygiene cause disease and kill 3.3 million people around the world annually, most of them children. In southern Ethiopia and in northern Kenya, a lack of rain over the past few years has made even dirty water hard to find. But soon, for the first time, things are going to change.

C Bringing clean water close to villagers' homes is the key to the problem. Communities where clean water becomes accessible and plentiful are transformed. All the hours previously spent hauling water can be used to cultivate more crops, raise more animals or even start a business. Families spend less time sick or caring for family members who are unwell. Most important, not having to collect water means girls can go to school and get jobs. The need to fetch water for the family, or to take care of younger siblings while their mother goes, usually prevents them from ever having this experience.

D But the challenges of bringing water to remote villages like those in Konso are overwhelming. Locating water underground and then reaching it by means of deep wells requires geological expertise and expensive, heavy machines. Abandoned wells and water projects litter the villages of Konso. In similar villages around the developing world, the biggest problem with water schemes is that about half of them break down soon after the groups that built them move on. Sometimes technology is used that can't be repaired locally, or spare parts are available only in the capital.

E Today, a UK-based international non-profit organisation called WaterAid is tackling the job of bringing water to the most remote villages of Konso. Their approach combines technologies proven to last - such as building a sand dam to capture and filter rainwater that would otherwise drain away. But the real innovation is that WaterAid believes technology is only part of the solution. Just as important is involving the local community in designing, building and maintaining new water projects. Before beginning any project, WaterAid asks the community to create a WASH (water, sanitation, hygiene) committee of seven people. The committee works with WaterAid to plan projects and involve the village in construction. Then it maintains and runs the project.

F The people of Konso, who grow their crops on terraces they have dug into the sides of mountains, are famous for hard work. In the village of Orbesho, residents even constructed a road themselves so that drilling machinery could come in. Last summer, their pump, installed by the river, was being motorised to push its water to a newly built reservoir on top of a nearby mountain. From there, gravity will carry it down in pipes to villages on the other side of the mountain. Residents of those villages have each given some money to help fund the project. They have made concrete and collected stones for the structures. Now they are digging trenches to lay pipes. If all goes well, Aylito Binayo will have a tap with safe water just a three-minute walk from her front door.

adapted from National Geographic magazine

Choose the correct heading for paragraphs **A-E** from the list of headings below

List of headings	
I.	Why some plans have failed
II.	A rural and urban problem
III.	A possible success
IV.	Explaining a new management style
V.	Some relevant statistics
VI.	A regular trip for some people
VII.	Treating people for disease
VIII.	How water can change people's lives

Paragraph A

Paragraph B

Paragraph C

Paragraph D

Paragraph E

Paragraph F