

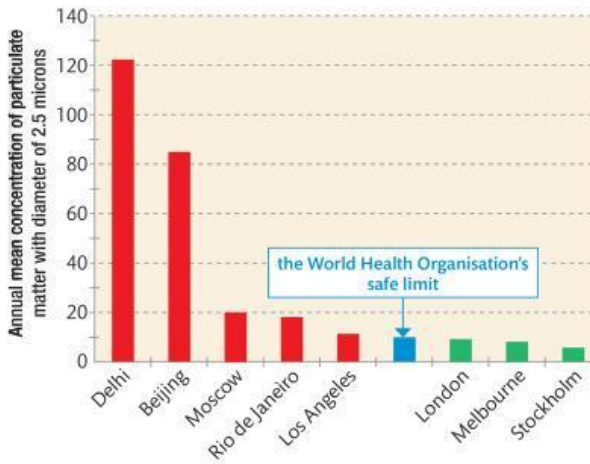
# 8.4

## READING

Open-ended questions

*I can identify specific information in a short article.*

- 1 Look at the graph about air pollution and label the photos: *Los Angeles, Stockholm and Beijing.*



1 \_\_\_\_\_



2 \_\_\_\_\_



3 \_\_\_\_\_

- 2 **SPEAKING** Discuss what you know about:
- the causes of air pollution.
  - the health problems caused by air pollution.
  - ways of reducing air pollution.
- 3 Read the text and check your ideas in Exercise 2. What do you think about the Smog Free Tower?

### EXAM FOCUS Open-ended questions

- 4 Read the text again and answer the questions.
- Who suffers most from air pollution?
  - What do people do to avoid polluted air?
  - How does a Smog Free Tower work?
  - What can you make with smog particles?
  - What motivated the designer to create the Smog Free Tower?
  - How does the Smog Free Tower project develop?

- 5 Read the text again and complete the notes.

### Smog Free Tower Project

- Number of people dying of air pollution: \_\_\_\_\_ a year
- Symptoms of health problems caused by air pollution: \_\_\_\_\_ and \_\_\_\_\_
- Name of the Smog Free Tower's inventor: \_\_\_\_\_
- The Smog Free Tower's height: \_\_\_\_\_
- Type of energy used by the tower: \_\_\_\_\_
- Number of towers to be placed in China: \_\_\_\_\_

- 6 **3.38** Complete the collocations with the words in blue in the text. Then listen, check and repeat.

- |                       |                 |
|-----------------------|-----------------|
| 1 air _____           | 6 face _____    |
| 2 air _____           | 7 factory _____ |
| 3 dust _____          | 8 smog _____    |
| 4 exhaust _____       | 9 vacuum _____  |
| 5 environmental _____ |                 |

- 7 Answer the questions with words in Exercise 6.

- What is responsible for over three million deaths every year? *Air pollution*
- What are the three main causes of smog in Beijing?
- What do people wear to protect themselves from air pollution?
- What does the Smog Free Tower look like?
- The designer says it is the biggest 'what' in the world?
- What does the tower collect and store?
- Which Chinese ministry wants to put towers in other cities?

- 8 **SPEAKING** Discuss which of these environmental problems affects the world, your country and you the most.

- air pollution** (smog from exhaust fumes, factory smoke etc.)
- ocean and river pollution** (chemicals from factories or plastic)
- land pollution** (chemicals used in farming)

- 9 **SPEAKING** List three things that you, your country or the world could do to solve the problem of air, water and land pollution. Discuss as a class.

*You could use public transport more or walk or cycle to places ...*

# The Tower That Sucks in Smog and Spits Out Clean Air

3.37

The city of Beijing has such a big problem with its air quality that there are days when you can't see the buildings on the other side of the street. According to Nature Magazine, **air pollution** is responsible for three million deaths per year, and most of these deaths are in Asia. More and more people suffer from chest pain and have difficulty breathing. Children and the elderly are most at risk.

The 'Smog' – a blend of the words 'smoke' and 'fog' – is mainly caused by car **exhaust fumes**, **factory smoke** and **dust storms** from local construction projects. To protect themselves from the unhealthy effects of pollution, people wear **face masks** and children play sports indoors.

Last week, a Smog Free Tower was erected in the arts district of Beijing. It is part of an air purifying project by Daan Roosegaarde from Holland and is designed to take in smog and release clean air. The seven-metre-high tower resembles the kind of **air purifier** you may have in your house. Roosegaarde describes it as the largest smog **vacuum cleaner** in the world.

The Smog Free Tower was created by Roosegaarde and a green tech company in the Netherlands. It runs on renewable power. **Smog particles** that are dangerous to health are collected and stored inside the tower. The tower then blows out cleaner air. Roosegaarde uses the collected smog particles to make jewellery. When you buy a Smog Free Ring or a pair of cufflinks, you buy 1,000 cubic metres of clean air.

Roosegaarde got the idea for the Smog Free Project when he visited Beijing in 2013. One day he looked out of his hotel window and he simply couldn't see anything. The city had disappeared under a thick layer of smog.

Roosegaarde's project has the support of the Chinese Ministry of **Environmental Protection**, who have requested towers in four other cities. Roosegaarde is planning to set up 800 of his giant air purifiers in parks all over China to raise awareness of the huge problem of pollution. He believes that both citizens and the government need to work together to fight pollution. His dream is that in ten to fifteen years from now, we won't need his towers anymore.



## WORD STORE 8E Word families

10 3.39 Complete WORD STORE 8E with the correct noun, verb or adjective in the text. Mark the stress. Then listen, check and repeat.