

Air pollution

READING

LEVEL
Intermediate

NUMBER
B1_1023R_EN

LANGUAGE
English

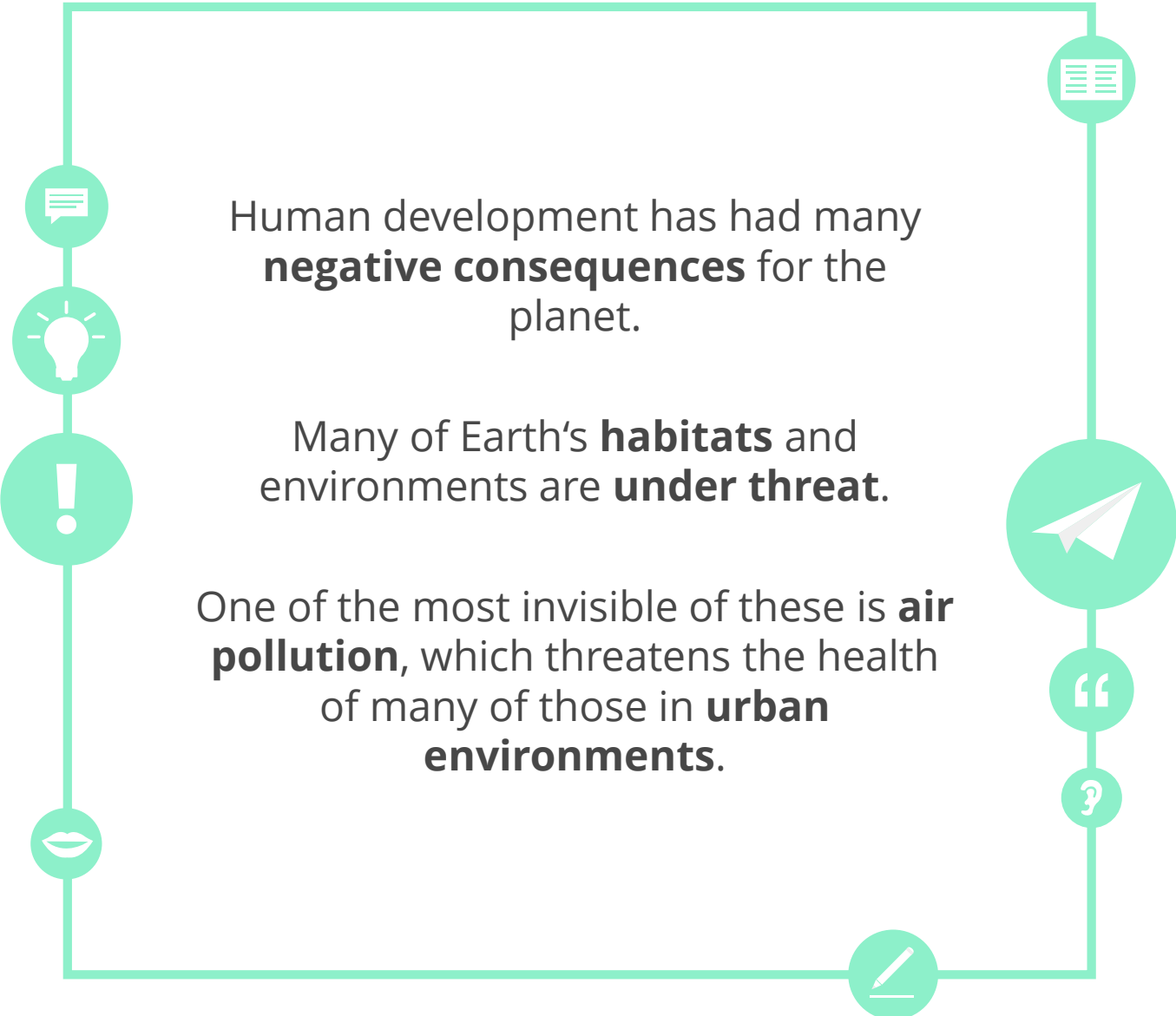




Goals

- Practise reading a text about air pollution
- Practise discussing the various consequences of air pollution
- Practise talking about potential solutions and efforts to reduce air pollution





Human development has had many **negative consequences** for the planet.

Many of Earth's **habitats** and environments are **under threat**.

One of the most invisible of these is **air pollution**, which threatens the health of many of those in **urban environments**.



Vocabulary review

**renewable
energy**

wind energy

solar energy

**nuclear
energy**

green cars

bio products

**environmental
policies**

**global
warming**

hydropower



**climate
change**



Sentences slide



More people should invest in **renewable energy**.

The government revealed a range of new **environmental policies**.



Solar energy is power captured from the sun.

There are many debates surrounding the use of **nuclear energy**.





Sentences slide



I try to buy **bio products** whenever I can.

The polar ice caps are melting due to **global warming**.



To reduce emissions, cities should encourage the use of **green cars**.

There is little doubt in the existence of **climate change**.





Air pollution

Pollution takes many forms. You might not be able to see the **emissions** and **noxious** byproducts of **industry** and **human activity**, but they can **create** risks to our health and that of the planet.

People who live in cities are **exposed** to higher levels of pollution. Air pollution is made of **chemicals** and **particles** in the **atmosphere**. There are many causes of air pollution; some comes from **natural sources** – **bushfires** or **volcanic eruptions**, for example. However, the vast **majority** is the **result** of human activity.





Air pollution

Industry, farming, **mining** and **power generation** are just a few of the activities that **contribute** to the polluted atmosphere. **Smoke** and **fumes** from **factories** and human industry release **emissions** into the air.

Burning fossil fuels, such as **coal**, for our energy needs **produces greenhouse gases**, which trap heat in the atmosphere, warming the temperature of the **planet**. As a result of this, these **toxic emissions** remain **stuck**, making air pollution worse.



Industry contributes to air pollution.





Air pollution

Smog is also a type of air pollution. Smog forms as a result of high temperatures and **increased** levels of **radiation**. **Smog** can make it hard to see and is **extremely harmful** to our health.

Smoggy brown haze can cause **damage** to the eyes and the lungs and it can affect the healthy growth of plants. The **poisonous fumes** from our **cars** can settle more easily as smog in warm weather.





Air pollution

**Have you ever experienced air pollution?
Where was it?**





Adjectives

Write each of the below words in a new sentence.



toxic

poisonous

smoggy

chemical

fumes

climate change



Description time!

Use as many adjectives as you can to describe the pictures below.

Write in full sentences.





Air pollution

Air pollution can have **serious consequences** for human health. When you breathe in polluted air you **inhale** chemicals, **pesticides** and industrial fumes.

Residents in larger cities, where air pollution is **common**, might sometimes suffer from **difficulties** breathing, or have itchy eyes. Lots of exposure to pollution can result in lung **disease** and cancer.





Air pollution

Children who live in areas with a **high density** of air pollution are at risk of developing lung diseases. In some some polluted cities breathing the air over a long period of time can be the same as smoking 40 cigarettes.



Air pollution is an invisible killer.





Air pollution

What can be done to help the residents of cities like Mumbai, Beijing, New York and London?

The **reduction** of **pollutants** in the air is something that many **urban leaders** have set to **solve**. In some cities, older models of cars which create a higher, and more **concentrated**, amount of traffic **fumes** have been **banned** from being used in the **inner** city.





Side effects

**Which of these conditions were considered to be consequences of air pollution in the article?
Can you describe their side effects?**



lung cancer

lung disease

dementia

itchy eyes

asthma



Write about smog

Write about the effects and consequences of smog in large cities. Use the subjects below to guide your writing. Use vocabulary and facts from the text.

What is smog?

How does it form?

What are some of its consequences of smog for a city?

A sheet of white lined paper with a spiral binding on the left side. The paper has several horizontal lines for writing.



Air pollution

Regulations which impose fines on rulebreakers work to **lower** the density of **toxic fumes** in these cities. Other **reduction** ideas are based on limiting the use of **fossil fuels** like **coal** and **oil**. The **burning** of these fuels is the largest **contributing** factor to air pollution. Changing to cleaner sources of power, such as solar or wind energy, can reduce the extent and consequences that pollution can have.





Air pollution

A complete shift to **renewable** energy would save lots of people from **life-threatening disease**, and save hundreds of billions a year in health costs.

Just because you can't see something, does not mean it isn't there. Every minute we breathe in 10 litres of air. According to scientists, air pollution kills more than 3.2 million people per year.



Better air quality results in better health for all.





Air pollution

These figures **prompted** country leaders to think about the way we **organise** our cities and **generate** our power. Birth **deformities**, cancer rates and lung problems caused by air pollution can be **reduced** with the right **regulations** and **strategies**. The residents of **smoggy, fume-filled** cities deserve it!





Words from the text

Now you have read all of the text, can you define what the below mean?



Life-threatening disease

renewable

radiation

regulations

greenhouse
gases

fume-filled

banned



Coal and oil

Use the pictures below to help you explain some of the environmental consequences of burning fuels like coal and oil.





Your thoughts

**What is the city like
where you live?**

**Do you know anyone
who has experienced
air pollution?**



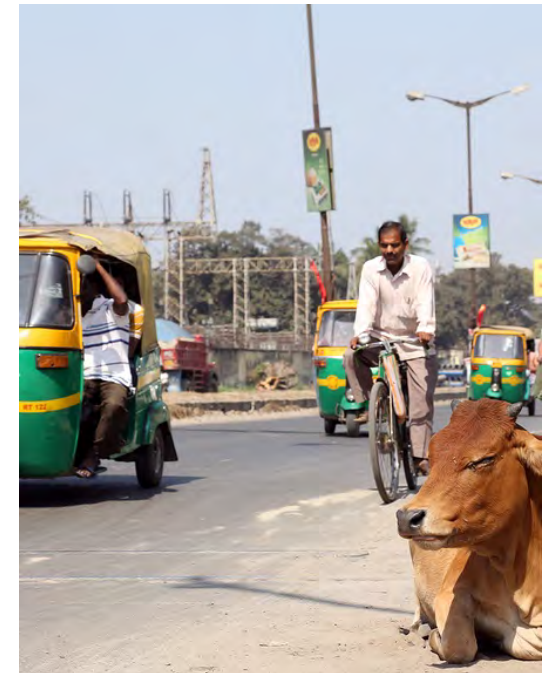
New Dehli

Read the facts about New Dehli's air pollution problem below.

New Dehli's air pollution levels are **twenty times** the **limit** that is **considered safe**. It is one of the world's most polluted large cities. The air quality is so bad that the city's residents must wear masks to avoid breathing in harmful chemicals.

Some of the contributing factors include:

- Farmers burning the remains of their crops rather than clearing fields for replanting (this is more expensive)
- **Emissions** from traffic
- Industrial fumes
- Construction dust



What are some potential solutions to these problems?



Pollution problems

**Talk about the areas below with the teacher.
How do they contribute to New Dehli's air pollution problem?**



traffic

agriculture

industry



Dear...

Write to a letter to the mayor of New Dehli and suggest how they might be able to tackle the air pollution problems. Include some of the vocabulary from the lesson.

A rectangular box containing a writing template. It features a horizontal line at the top right for an address, a horizontal line on the left for a name, and several horizontal lines in the center for the main body of the letter. There are also horizontal lines at the bottom left for a signature and a closing line.



Dictogloss

**Your teacher is now going to read to you.
Write down what you hear your teacher say.**

A sheet of white paper with a vertical line of circular punch holes on the left side. The paper is ruled with horizontal lines, providing space for writing.



What can we do?

**Can you think of any
other ways that we
could improve air
pollution?**

**What is the air like in
your city?**



Reflect on the goals

Go back to the second slide of the lesson and check if you have achieved all the goals of the lesson.

yes

no



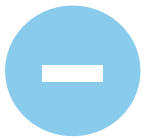


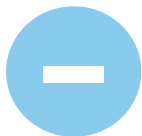
Reflect on this lesson

Think about everything you have seen in this lesson.
What were the most difficult activities or words? The easiest?











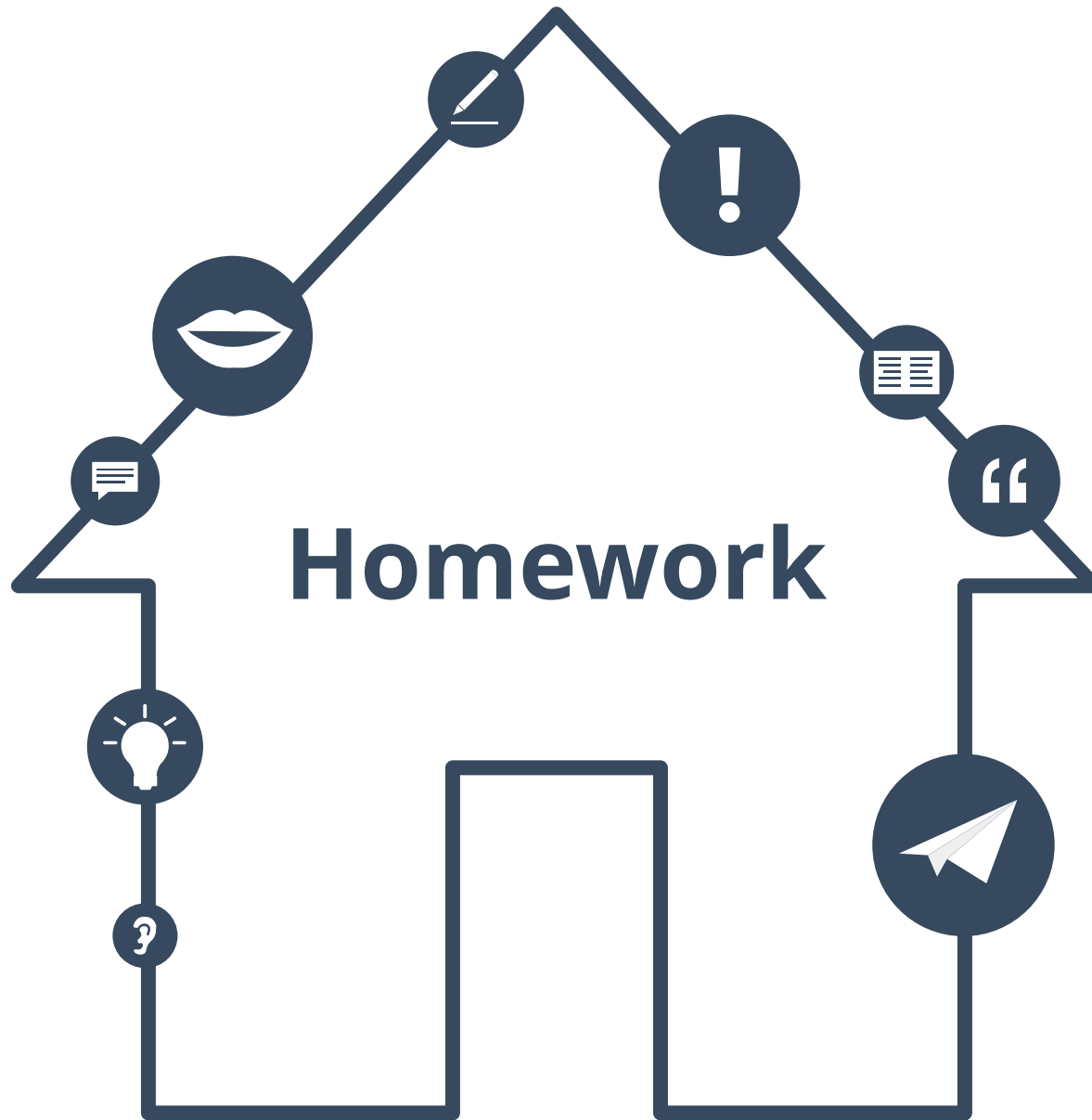
If you have time, go over
the most difficult slides again



Transcription

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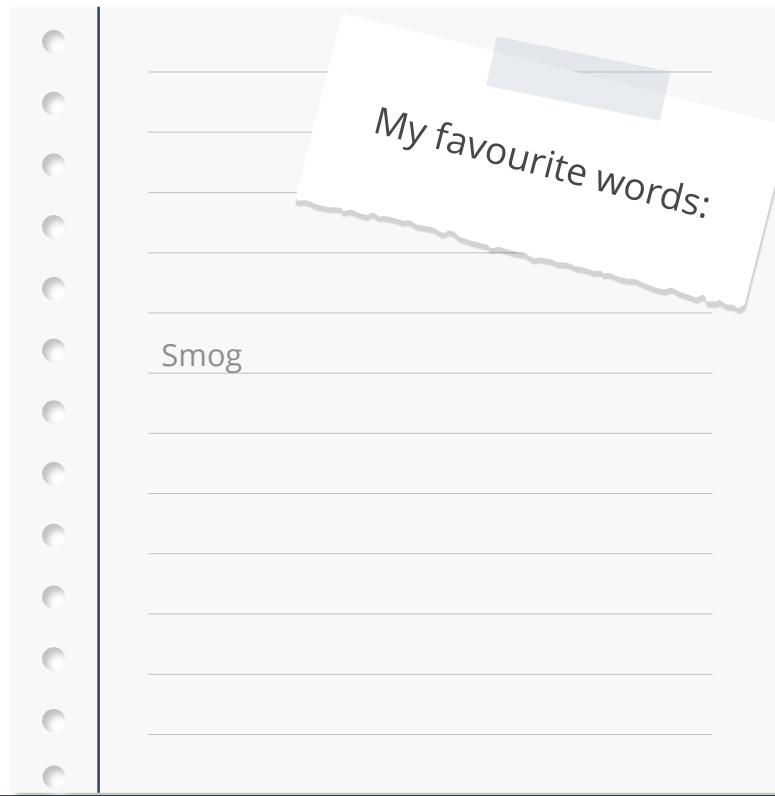


Homework



Vocabulary

Create a list of your favourite vocabulary from the lesson.

A graphic of a spiral-bound notebook page with horizontal lines. A white sticky note with a light blue tab is attached to the page. The sticky note contains the text "My favourite words:". Below the sticky note, the word "Smog" is written on one of the lines. The rest of the page is blank with several more lines available for writing.

My favourite words:

Smog



Air pollution

Write a summary of New Dehli's air pollution problems using the vocabulary from the lesson.

masks

polluted

regulations

reduction

smoggy

emissions

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