

## THE ENVIRONMENT

Listen to your teacher reading the following texts and fill in the blank spaces:

### Energy

- We've managed to reduce \_\_\_\_\_ in our \_\_\_\_\_ by about \_\_\_\_\_ in the last two years.
- That's excellent! How have you \_\_\_\_\_ that?
- Mainly because we've invested in a \_\_\_\_\_.
- What does that mean exactly?
- Well, we use the \_\_\_\_\_ from our printing presses to \_\_\_\_\_ to heat our dryers.
- What other \_\_\_\_\_ do you use?
- We don't use any \_\_\_\_\_. Most of our power comes from hydroelectric plants. We are hoping to use even more \_\_\_\_\_ sources in the future. Perhaps even \_\_\_\_\_.

### Disposing of waste

- How do you \_\_\_\_\_ your waste in your factory?
- We try to \_\_\_\_\_ as much as we can.
- What about the rest? How do you \_\_\_\_\_ it?
- We have to send it to \_\_\_\_\_. It's very expensive, because the Government recently introduced a new landfill \_\_\_\_\_, so we're planning to build a new \_\_\_\_\_ plant next year to \_\_\_\_\_ our waste.
- But doesn't incineration produce \_\_\_\_\_?
- Yes, you're right, it does. But we believe it's less \_\_\_\_\_ to the \_\_\_\_\_ than landfill.

**Match words with definitions:**

a) Widespread	1. The process by which a liquid, typically water, transforms into vapor or gas due to an increase in temperature or exposure to air.
b) Congestion	2. The emission and transmission of energy through electromagnetic waves or particles, such as heat or light.
c) Radiation	3. Refers to something that is prevalent or existing over a large area or affecting a significant portion of a population or region.
d) Evaporation	4. The act of making something more stable, balanced, or consistent, often referring to maintaining or achieving a state of equilibrium or unchanging conditions.
e) Stabilization	5. The process by which fertile land becomes desert or arid due to various factors, including soil degradation, climate change, and human activities.
f) Desertification	6. A condition of overcrowding or obstruction, often used to describe traffic, crowded areas, or situations where a large number of people or things are closely packed, leading to delays or reduced efficiency.

**Climate change: terminology**

1. \_\_\_\_\_ is the process whereby the sun turns water into vapour.
  - a) Condensation
  - b) Evaporation
  - c) Transpiration
  - d) Convection

2. The ozone layer protects the earth from the harmful effects of \_\_\_\_\_ from the sun.
  - a) condensation
  - b) precipitation
  - c) evaporation
  - d) radiation
  
3. If sea levels continue to rise there will be \_\_\_\_\_ flooding.
  - a) widespread
  - b) congested
  - c) intense
  - d) minimal
  
4. The objective of the Kyoto Protocol was to achieve \_\_\_\_\_ of greenhouse gas concentrations in the atmosphere.
  - a) solidarity
  - b) fluctuation
  - c) concentration
  - d) stabilization
  
5. \_\_\_\_\_ can result from greatly reduced rainfall due to climate change or human practices such as deforestation.
  - a) wildification
  - b) wilderness
  - c) desertification
  - d) desertness
  
6. A great deal of CO<sub>2</sub> production is the result of traffic \_\_\_\_\_.
  - a) obstruction
  - b) jamming
  - c) overcrowding
  - d) congestion

### **Read the text and make its summary**

Widespread environmental concerns are prompting a global effort to address issues like desertification, where fertile land slowly transforms into arid wastelands. This process often results from the destabilization of ecosystems caused by deforestation, further aggravating the problem. Additionally, the Earth's climate is affected by the widespread emissions of greenhouse gases, contributing to the stabilization of higher temperatures through the greenhouse effect.

Another crucial aspect of the Earth's energy balance is radiation. Solar radiation, in the form of sunlight, warms the planet's surface and triggers processes like evaporation. However, congestion in the form of increased greenhouse gas concentrations can trap excess heat, leading to climate changes and extreme weather events.

Efforts to combat these challenges include promoting biodiversity and adopting sustainable land management practices. For example, reforestation can help mitigate deforestation and reduce the impact of desertification, ultimately contributing to the widespread goal of a more stable and sustainable environment. It is imperative that we collectively work towards solutions to ensure the well-being of our planet and future generations.

### **Discussion questions:**

1. What are the primary environmental concerns discussed in the text?
2. How does deforestation contribute to the problem of desertification?
3. Explain the greenhouse effect and its impact on global temperatures as mentioned in the text.
4. What role does solar radiation play in the Earth's energy balance, and how is it related to evaporation?
5. How does an increase in greenhouse gas concentrations lead to congestion and climate change?
6. What are some of the challenges associated with widespread efforts to combat these environmental issues?
7. How can reforestation help mitigate the problems discussed in the text?
8. Why is biodiversity important in addressing these environmental concerns?
9. What are some examples of sustainable land management practices mentioned in the text?
10. What is the ultimate goal of the collective efforts to address these challenges for future generations?

Answers:

## Energy

1. We've managed to reduce **energy consumption** in our **factory** by about **15%** in the last two years.
2. That's excellent! How have you **managed** that?
3. Mainly because we've invested in a **heat recovery system**.
4. What does that mean exactly?
5. Well, we use the **exhaust gases** from our printing presses to **provide energy** to heat our dryers.
6. What other **sources of energy** do you use?
7. We don't use any **fossil fuels**. Most of our power comes from hydroelectric plants. We are hoping to use even more **energy from alternative** sources in the future. Perhaps even **wind power**.

## Disposing of waste

1. How do you **dispose of** your waste in your factory?
2. We try to **recycle** as much as we can.
3. What about the rest? How do you **get rid of** it?
4. We have to send it to **landfill**. It's very expensive, because the Government recently introduced a new landfill **tax**, so we're planning to build a new **incineration** plant next year to **burn** our waste.
5. But doesn't incineration produce **carbon monoxide**?
6. Yes, you're right, it does. But we believe it's less **harmful** to the **environment** than landfill.

- A - 3
- B - 6
- C - 2
- D - 1
- E - 4
- F - 5

Evaporation  
radiation  
widespread  
stabilization  
desertification  
congestion

1. The primary environmental concerns discussed in the text are desertification, the greenhouse effect, deforestation, solar radiation, congestion caused by greenhouse gas emissions, and the need for sustainability.
2. Deforestation contributes to desertification by destabilizing ecosystems and accelerating the transformation of fertile land into arid wastelands.
3. The greenhouse effect is a process where greenhouse gases trap heat in the Earth's atmosphere, leading to the stabilization of higher global temperatures, a phenomenon commonly associated with climate change.
4. Solar radiation warms the Earth's surface and triggers processes like evaporation, where water is converted into vapor.
5. An increase in greenhouse gas concentrations leads to congestion by trapping excess heat in the atmosphere, causing climate change and more extreme weather events.
6. Challenges associated with widespread efforts to combat these environmental issues include the need for international cooperation, addressing complex factors like deforestation, and transitioning to sustainable practices.
7. Reforestation can help mitigate the problems discussed in the text by restoring forests and countering deforestation, which contributes to the prevention of desertification.
8. Biodiversity is important in addressing these environmental concerns because it contributes to the stability and resilience of ecosystems, helping them better withstand environmental changes.
9. Sustainable land management practices include reforestation, afforestation, and the promotion of conservation measures.
10. The ultimate goal of collective efforts is to create a more stable and sustainable environment that ensures the well-being of current and future generations, protecting the planet and its resources.