



**DEVI  
SANSTHAN**

Dignity Education  
Vision International

*Leave no one behind*



**GLOBAL WARMING**

**1**

## Global Warming:

Tara had started to read and understand the daily newspaper, a habit she picked up from her grandmother. She also learned to look up the meanings of difficult words as well as the locations of new places in the atlas. Lately, Tara had started to read Time magazine. The top article in the latest edition warned that we should be worried about the melting of the ice in Antarctica. It said that long-term heating of the Earth's surface was caused by human interventions, mainly due to the burning of fossil fuels like coal (to produce electricity), oil, and gas (to drive our vehicles). This is leading to a rise in temperature of at least 1 degree Celsius.



Tara wondered how a rise in temperature of merely 1 degree could have a major effect on the melting of ice. She picked up the thermometer used to measure body temperature when she had a fever and did some quick calculations. She concluded that just like a rise in temperature of 1 degree Celsius made her very hot when she had a fever, a similar rise could cause the ice/snow to melt. When fossil fuels are burned, they release carbon





dioxide gas into the atmosphere. This carbon dioxide spreads around like a blanket, preventing heat from escaping and at the same time, absorbing infrared radiation (felt as heat). The ozone layer present in the atmosphere is depleted by the release of CFC gas from refrigerators, air conditioners, and aerosol sprays. This ozone layer protects the Earth from harmful ultraviolet rays of the sun. Tara concluded that if we saved electricity, we would burn a smaller amount of coal. She got up quickly and checked all the rooms in her house to see if any fan or light

sources were on and not being used. She came back and continued reading the article: CO<sub>2</sub> and CFCs are called greenhouse gases. These gases trap heat and reflect it back into the atmosphere, keeping the climate comfortable. Without this effect, the Earth would be 33 degrees Celsius cooler and would freeze many life forms. But too much of these gases would lead to more harm than good. She got up and switched off her room AC; her desert cooler was just as fine. At least she could do her bit to control CFC gas.



*Let's Save* THE PLANET

## New Words

- |  |  |   |
|--|--|---|
| 1. <b>interventions</b> - actions taken to improve or change something | 2. <b>depleted</b> - reduced or used up              | the Earth's atmosphere and contribute to global warming |
|  | 3. <b>greenhouse gases</b> - gases that trap heat in |   |

Find other new and interesting words for each other, and write their meanings in your notebooks.

## Comprehension

- |  |   |
|--|---|
| 1. What is an atlas used for?                            | 4. What is the name of the tool used to measure body temperature? |
| 2. Which magazine did Tara start reading recently?       | 5. What does the ozone layer protect us from?                     |
| 3. What kind of fossil fuel is used to make electricity? | 6. Can you name two gases that cause greenhouse effect?           |

Take turns to make more questions like these above for each other and answer them.

## Prompts Pair up

- Energy Conservation Challenge:** Brainstorm a list of ways to save electricity and reduce the use of fossil fuels at home and in school. For one week, each student should commit to implementing at least five energy-saving actions from the list. After the week is over, partners should discuss their experiences and share which actions were most effective and easy to implement.
- Upcycling Project:** Working with your partner, choose an item that is typically thrown away or discarded, and come up with a creative way to repurpose or upcycle it. Turn the item into something new and useful, demonstrating the importance of reducing waste and conserving resources. Share your upcycled creation with the class and explain the inspiration behind it and the environmental benefits of upcycling.

Watch the video on the Global Warming using the QR code.



Watch Videos On:

[www.YouTube.com/GlobalDream](http://www.YouTube.com/GlobalDream)



Follow Us On Facebook:

[www.facebook.com/GlobalDream2F2E](http://www.facebook.com/GlobalDream2F2E)

[dignityeducation.org](http://dignityeducation.org)

740 840 6000



**DEVI SANSTHAN**  
Dignity Education  
Vision International

*Leave no one behind*

Global Dream Disruptive Literacy is a non-profit initiative of  
DEVI Sansthan: Dignity, Education, Vision International  
10 Station Road, Lucknow 226001, UP, INDIA