CLASS XII | SUPPLEMENTARY READER
VISTAS | CHAPTER 3:
JOURNEY TO THE END OF THE EARTH

ABOUT THE AUTHOR

Tishani Doshi (9 December 1975) is an Indian poet, journalist and a dancer based in Chennai. Born in Madras, India, to a Welsh mother and Gujarati father, she graduated with a Master's degree in Creative Writing from the Johns Hopkins University. She received Eric Gregory Award in 2001. Her first poetry collection Countries of the Body won the 2006 Forward Poetry Prize for the best first collection.

THEME

The lesson refers to the manner in which geological phenomena enable us to trace the history of mankind. It also tells us about the way in which landmasses and countries are formed. The writer emphasizes the impact of human endeavour to dominate nature. It should be realized that exploration of this landmass under the ice cap will certainly reveal valuable information on the theory of birth and evolution of our planet and its association with the solar system and the galactic evolution.

SUMMARY

For a south Indian man travelling to Antarctica from Madras, it takes nine time zones, six checkpoints, three water-bodies and just as many ecospheres to reach there. Tishani Doshi travelled to the Southern end of the Earth along with an expedition group named 'Students on Ice' that provides opportunity to the young minds to sensitise towards the realistic version of climatic changes happening in the world. According to the founder of the organisation, we are the young versions of future policy makers who can turn the situation around. Antarctica is one of the coldest, driest and windiest continent in the world. As far as the eyes can see, it is completely white and its uninterrupted blue horizon gives immense relief. It is shocking to believe that India and Antarctica were part of the same supercontinent Gondwana, that got segregated into countries giving rise to the globe we know today. Antarctica had a warmer climate until then. Despite human civilisation around the globe, it still remains in it pure form. Being a south Indian sun-worshipping guy, it was unimaginable for the author to visit the place that constitutes world's 90 per cent of ice, a place so quiet that it is only interrupted by snow avalanches. It is a home to a lot of evidences that can give us a glimpse of the past and at the same time, Antarctica helps us foresee the future. The place gives an awakening to the future. The place gives an awakening to threatening alarm that global warming is actually real. Who knows if Antarctica will be warm again and even if it does, will we be alive to see it?

WORDS/PHRASES AND THEIR CONTEXTUAL MEANINGS

Expansive- covering wide area in terms of space or scope; extensive
Profound- very great or intense
Isolation- separation
Landmass- a continent or other large body of land
Amalgamated- combine or unite to form one structure
Supercontinent- a former large continent from which other continents are held to have broken off and drifted away
Thrived- prosper; flourish
Cordilleran folds- an extensive chain of mountains or mountain ranges
Precambrian granite shields- large areas of relatively low elevation that forms part of continental masses
Mind-boggling- overwhelming; startling
Frigid- very cold in temperature
Desolate- (of a place) uninhabited and giving an impression of bleak emptiness
Surreal- unusual; bizzare
Austral- relating to the Southern Hemisphere
Ubiquitous- everywhere; pervasive
Avalanche- snowslide
Calving- split and shed
Consecrates- make or declare sacred
Immersion- submerge
Prognosis- a forecast of the likely outcome of a situation
Paltry- petty; insignificant
Ruckus- a row or commotion
Etching- engraved
Unmitigated- unconditional
Pristine- in its original condition; unspoilt
Blasé- unimpressed with or indifferent to something because one has experienced or seen it so often before

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QUESTIONS & ANSWERS | READING WITH INSIGHT (NCERT)

1. 'The world's geological history is trapped in Antarctica.' How is the study of this region useful to us?
A. The geological phenomena of separation of the landmass into various continents and water bodies almost six hundred and fifty million years ago marks the beginning of the human race on the Earth. Mammals started existing after dinosaurs became extinct which happened once the landmass separated.

2. What are Geoff Green's reasons for including high school students in the Students on Ice expedition?

A. Geoff Green took high school students on an expedition to one end of the Earth to make them realize the impact that human intervention could have on nature. He wanted the future policy - makers to experience how difficult it would be to sustain life with the rising temperatures. He wanted them to see the melting ice shelves so that they could estimate the trouble that mankind was headed to.

3. 'Take care of the small things and the big things will take care of themselves.' What is the relevance of this statement in the context of the Antarctic environment?

A. The statement holds great importance in context of the Antarctic environment. For instance, the phytoplanktons in the region serve as food for marine birds and animals. The depletion of the ozone layer affects the phytoplanktons and the carbon cycle. This can obstruct the existence of marine life. So, if the process carried on by these small grasses is taken care of, the processes of the bigger animals and birds can be taken care of.

4. Why is Antarctica the place to go to, to understand the earth's present, past and future?

A. Antarctica is the place to go to to understand the earth's past, present and future because it gives us an idea of how the earth was millions of years ago. The melting sheets of ice give us an idea of the future also.

Important Question and Answers (Additional)

Q. How would you describe Gondwana?

Ans.Gondwana was a giant amalgamated southern supercontinent, centering around present-day Antarctica. Humans had not arrived on the global scene. The climate was much warmer. There was a huge variety of flora and fauna. Gondwana thrived for 500 million years. When the age of the mammals got under way, the landmass was forced to separate into countries. Antarctica separated from the whole landmass shaping the globe as we know it today.

Q. What are phytoplanktons? What is their importance?

Ans. Phytoplanktons, the grasses of the sea, are single-celled organisms living in the southern ocean. They nourish and sustain the entire ocean food chain. Using sun's energy, they assimilate carbon and synthesize organic compounds. The diminishing number of the organisms due to depletion of ozone layers affects other organisms of the ocean, finally leading to the extinction of life on earth.

Q. What is 'Students on Ice?

Ans. 'Students on Ice' is an educational expedition to Antarctica. It takes high school students to show them the terrifying impacts of human activities in Antarctica so that, the students will realise that the end of the earth is quite near and therefore something should be done to save the planet.

Q. Why did Geoff Green decide to take high school students to Antarctica?
Ans. Geoff Green didn't find any good in taking curious celebrities to Antarctica until he thought of taking high school students. He believed that the high school students are the real future policy makers of the earth and the young enthusiasm in them would easily understand the seriousness of the threat that poses the earth by visiting Antarctica and they would act their bit to save the planet from further deterioration.

Q. Why is Students on Ice programme a success?
Ans. When one stands in the midst of the calving ice-sheets, retreating glaciers and melting icebergs, one realises that the threats to the earth are real. It is different and way more pragmatic from talking about Antarctica from the comfort zones of our warm countries and therefore being in Antarctica is a shocking realisation.

Q. Why are the youngsters called the future policy makers of the earth?
Ans. The youngsters according to Geoff Green are the future policy-makers because it is them who will bring substantial changes as they grow up. More than that, the more educated youth of today is the hope for the earth as many students are more informed and more aware of the weakening strength of the planet.

Q. How do geological phenomena help us to know about the history of humankind?
Ans. Geological phenomena certainly helps us to know about the history of humankind. A giant southern supercontinent- Gondwana did exist 650 million years ago. The climate was much warmer. It had a huge variety of flora and fauna. Gondwana thrived for 500 million years. Finally, it broke into separate countries as they exist today. It was the stage when dinosaurs were wiped out and the age of mammals started.

Q. What are the indications for the future of humankind?
Ans. Rapid human population growth and limited resources exert pressure on land. Burning of fossil fuels has only helped in increasing the average global temperature. Melting of ice-caps, depletion of the ozone layer and global warming are the real and immediate dangers for mankind. They will affect the lives of all the marine animals and the birds of the region.

DO-IT-YOURSELF EXERCISES
(LONG QUESTIONS)

Q1. What makes Antarctica an ideal subject of study?
Q2. Does the study of the lesson give you a feeling that man is his own great enemy?
