



(SUMMARY)

SECTION	In this UNIT you will develop your				
	READING SKILLS	WRITING SKILLS	SPEAKING SKILLS	LISTENING SKILLS	VOCABULARY
Introduction	<ul style="list-style-type: none"> Reading clues to solve cross-word puzzles 	<ul style="list-style-type: none"> Solving the cross-word 			<ul style="list-style-type: none"> Using words related to environment
(A) The Indian Rhinos	<ul style="list-style-type: none"> Deducing the meaning of unfamiliar words Analysing, interpreting, inferring and evaluating information 	<ul style="list-style-type: none"> Planning, organising and presenting ideas Using punctuation marks correctly Comparing and contrasting ideas and reaching conclusions Writing a report 	<ul style="list-style-type: none"> Expressing and arguing a point of view Taking active part in group discussion Expressing personal feelings. 		<ul style="list-style-type: none"> Using words related to conservation Learning expressions to recommend and suggest
(B) Save Mother Earth	<ul style="list-style-type: none"> Deducing the meaning of unfamiliar words Selecting and extracting information Analysing, interpreting, inferring and evaluating information 	<ul style="list-style-type: none"> Flow chart Formal letter to the editor of a newspaper Writing short responses Completing a table Power point presentation 	<ul style="list-style-type: none"> Role play Presenting a consensus Conveying ideas effectively Presenting oral reports Expressing and arguing a point of view Taking part in group discussion 	<ul style="list-style-type: none"> Listening for specific information from a taped interview 	<ul style="list-style-type: none"> Using words / phrases related to sustainability
(C) Save the Tiger	<ul style="list-style-type: none"> Analysing and inferring information Extracting specific information 	<ul style="list-style-type: none"> Web chart Gap filling Paragraph writing Dialogue writing Note making Answering MCQs 	<ul style="list-style-type: none"> Enacting out a dialogue Group discussion followed by class presentation 	<ul style="list-style-type: none"> Listening for specific information 	<ul style="list-style-type: none"> Learning words related to the qualities / characteristics of a tiger

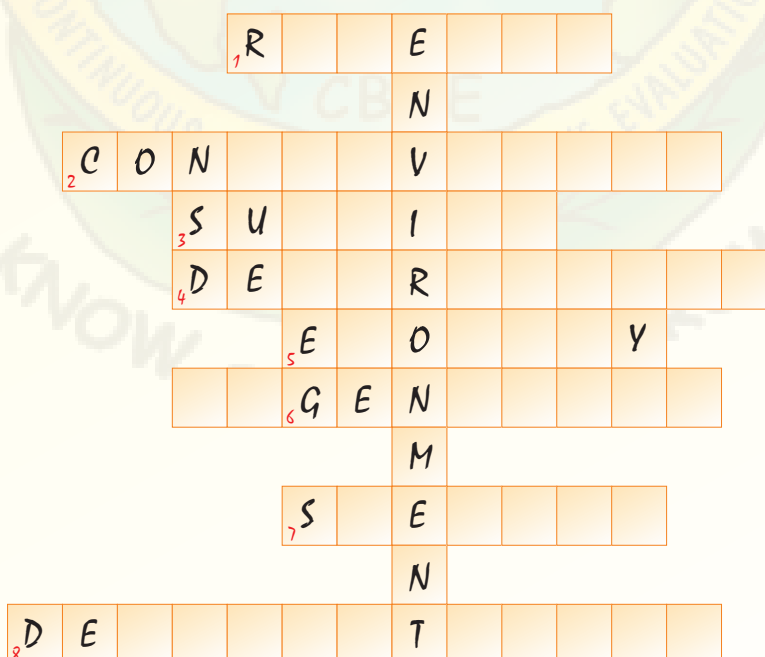
In this Unit.....

Introduction - a crossword puzzle, to remind us how important the Environment is.

- (A) "Rhinceros : Do they have a future?" Do they? Find out by reading, using your vocabulary skills, group discussion, and writing a report with recommendations to the World Wildlife Federation.
- (B) You will listen to a taped interview with Smitha Sahai and Manu Srivastava about pollution. Role - play a protest meeting, join a 'Save Mother Earth Campaign', write a formal letter to the Editor sharing your concerns about the environmental problems where you live and make a powerpoint presentation on an environmental issue.
- (C) Do you know about Project Tiger? Find out by reading some facts on tigers and write a paragraph on the need to protect them. Also read a poem, write and enact a dialogue on the freedom of animals.

INTRODUCTION

Complete this puzzle.





The list seems endless, doesn't it? Are these things not shameful enough to set us pondering deeply over the harm that we are inflicting on nature's creations?

1. Why is the list 'most shameful'?
2. What is the name of the organisation that has been formed to protect and conserve wild life?
3. Name at least ten other animals that are being exploited by man for commercial purposes. Surf the net to get your information and complete the following table.

Animal	Part of the body used	Product
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

A.2. Read this article about the great Indian Rhinoceros. [You will find the information useful for your group discussion in A.5.]

The **Indian Rhinoceros** or the **Great One-Horned Rhinoceros** or the **Asian One-horned Rhinoceros** (*Rhinoceros unicornis*) is a large mammal primarily found in north-eastern India, Nepal and parts of Bhutan. It is confined to the tall grasslands and forests in the foothills of the Himalayas.

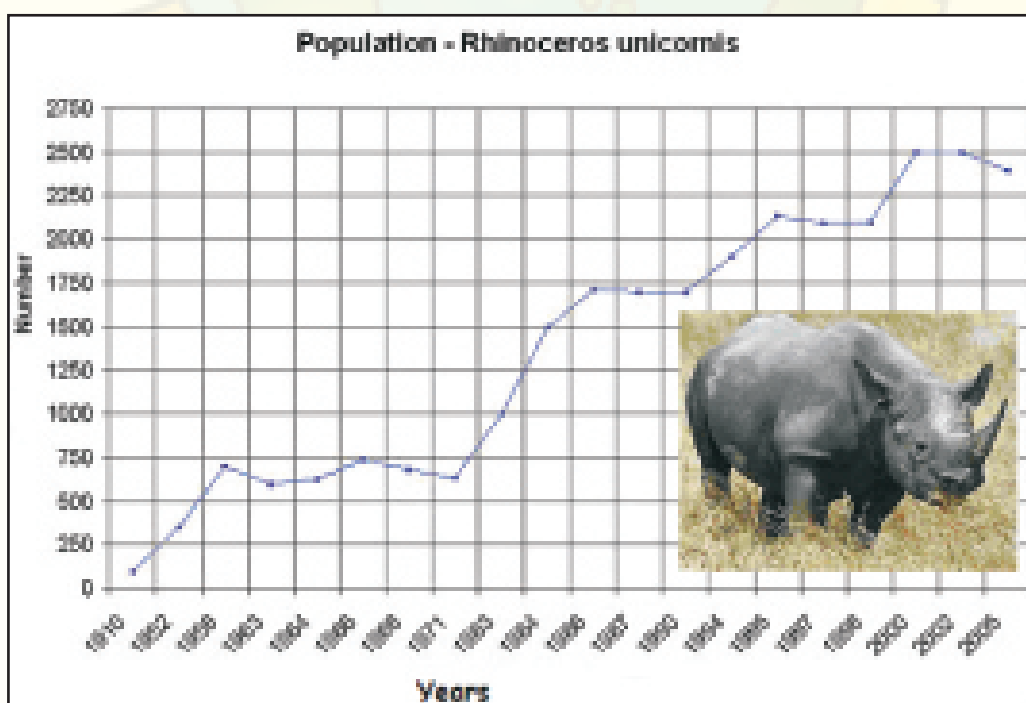
The Indian Rhinoceros once ranged throughout the entire stretch of the Indo-Gangetic Plain but excessive hunting reduced their natural habitat drastically.

Today, about 3,000 Indian Rhinos live in the wild, 1,800 of which are found in India's Assam alone. In 2008, more than 400 Indian Rhinos were sighted in Nepal's Chitwan National Park.

In size it is equal to that of the White Rhino in Africa; together they are the largest of all rhino species. The Great One-Horned Rhinoceros has a single horn; this is present in both males and females, but not on newborn young. In most adults, the horn reaches a length of about 25 centimetres, but has been recorded up to 57.2 centimetres in length. The nasal horn curves backwards from the nose. The horn is naturally black.

This prehistoric-looking rhinoceros has thick, silver-brown skin which becomes pinkish near the large skin folds that cover its body. The Male develops thick neck-folds. It has very little body hair aside from eyelashes, ear-fringes and tail-brush.

These rhinos live in tall grasslands and riverine forests, but due to habitat loss they have been forced into more cultivated land. They are mostly solitary creatures, with the exception of mothers and calves and breeding pairs, although they sometimes congregate at bathing areas.



The Indian Rhinoceros makes a wide variety of vocalizations. At least ten distinct vocalizations have been identified: snorting, honking, bleating, roaring, squeak-panting, moo-grunting, shrieking, groaning, rumbling and humphing. In addition to noises, the rhino uses olfactory communication.

In aggregations, Indian Rhinos are often friendly. They will often greet each other by waving or bobbing their heads, mounting flanks, nuzzling noses, or licking. Rhinos will playfully spar, run around, and play with twigs in their mouth. Adult males are the primary instigators in fights. Fights between dominant males are the most common cause of rhino mortality. Indian rhinos have few natural enemies, except for tigers. Tigers sometimes kill unguarded calves, but adult rhinos are less vulnerable due to their size. Humans are the only other animal threat, hunting the rhinoceros primarily for sport or for the use of its horn. Indian Rhinos have been somewhat tamed and trained in circuses, but they remain dangerous and unpredictable animals.

In the nineteenth and early twentieth century, the Indian Rhinoceros was hunted relentlessly. Reports from the middle of the nineteenth century claim that some military officers in Assam individually shot more than 200 rhinos. In the early 1900s, officials became concerned at the rhinos' plummeting numbers. By 1908 in Kaziranga, one of the rhino's main ranges, the population had fallen to around 12 individuals. In 1910, all rhino hunting in India became prohibited.

The rhino is a major success of conservation. Only 100 remained in the early 1900s; a century later, their population has increased to about 2500 again, but even so the species is still endangered. The Indian rhino is illegally poached for its horn. Some cultures in East Asia believe that the hair has healing and potency powers and therefore is used for traditional Chinese medicine and other Oriental medicines.

The Indian and Nepalese Governments have taken major steps toward Indian Rhinoceros conservation with the help of the World Wildlife Fund (WWF). The Kaziranga National Park and Manas National Park in Assam, Pobitora Reserve Forest in Assam (having the highest Indian rhino density in the world), Orang National Park of Assam, Laokhowa Reserve Forest of Assam (having a very small population) and Royal Chitwan National Park in Nepal are homes to this endangered animal.



UNIT-3

ENVIRONMENT

A.3. In Units 1 and 2 you learnt and practised the skill of deducing the meanings of new words by using other words in the given context. Now use that skill to deduce the meanings of words in the article you have read. Here is an example.

- (a) They are solitary creatures with the exception of the mothers and calves and breeding pairs, although they sometimes congregate at bathing places.



Deduce the meanings of the following words from the passage you have just read, using other words in the context to help you. Copy and complete the following:

Word	Words/ clues that helped me	What I think the word means	What the dictionary says	Were you(✓) (tick mark) or (x)
confined				
ranged				
overlapping				
bobbing				
olfactory				
aggregation				
plummeting				
mortality				
vulnerable				
poached				

A.4. Punctuate the Following:

the indian rhinoceros was the first rhinoceros known to europeans rhinoceros comes from the greek rhino meaning nose and ceros meaning horn the indian rhinoceros is monotypic there are no distinct subspecies rhinoceros unicornis was the type species for the rhinoceros family first classified by carolus linnaeus in 1758 the indian rhinoceros was the first rhino widely known outside its range the first rhino to reach europe in modern times arrived in lisbon in may 20, 1515 king manual I of portugal planned to send the rhinoceros to pope leo x but the rhino perished in a shipwreck.

A.5. Imagine that you are conducting a research on the conservation of a few animal species in India. You have been asked by the Wildlife Trust of India to prepare a report on the future of the YAK that lives in the Ladakh region of the Himalayan Mountains. In groups of four, discuss the issue and make notes for your report. Refer to the article in A.2 and the information in the box given here.



DOMESTIC YAK

- herd animals 2-2.2m tall
- used in sports
- kept for milk, fur, fibre, meat, drawing ploughs etc



WILD YAK

- length:3-3.4m
- habitat: treeless uplands
- killed for food
- insulated from cold by dense, close matted under hair, shaggy outer hair
- hunted for similar reasons as the domestic ones

Within your group, discuss

- What is the problem? How has it arisen?
- What is the best way to preserve these species?
- Why do we need to preserve these species?
- What values are to be inculcated in the hearts of human beings? Why?
- What actions would you recommend to the World Wildlife Federation?
- How is global warming affecting these species?

A.6. In your discussions in groups, and in your individual written report, you will find the following language useful:

GROUP DISCUSSION

When recommending

I	propose	that....
	suggest	
	recommend	

What about?
Why don't we

We could	consider.....
think	about

WRITTEN REPORT

When recommending

I	propose	that.....
	suggest	
	recommend	
	urge	

I strongly recommend that.....

I urge the commission to.....

It is	recommended	that.....
	proposed	

My	recommendation	is that....
	proposal	

When giving reasons

.....as.....

.....because.....

.....since.....

My reason is that.....

When giving reasons

.....as.....

.....because.....

.....since.....

My reason is that.....

In view of the fact that.....

A.7. As a Conservationist, write a report to the World Wildlife Federation, based on A.5. Remember 'CODER'

From: (your name), Conservationist.

To: The Chairman

WWF

(Date)

(Suitable Heading)

(Suitable introduction) e.g. You recently asked me to submit a report on my study of YAK - in particular, their future. The following are my findings and recommendations.

1. The current problem.
2. Reasons why this problem has arisen.
3. Effects of the problem
4. Recommendation
5. Conclusion (Suitable ending, including other ideas for increasing YAK population)

Your name

(Conservationist)

B. SAVE MOTHER EARTH

B.1. Listen carefully to 'Meet the personality of the month programme' and as you are listening fill in the details.

ENVIRONMENTALIST: Mr Manu Srivastava

Causes of pollution

1. Atmosphere

a. _____

2. Water

a. _____

 b. _____

3. Effects of pollution

a. _____

 b. _____



Human Rights activist- Ms.Shraddha Shankar

Reasons for working in the factory

a. _____

Effects

a _____

b _____

c _____

Steps which can be taken

a _____

b _____

c _____

B.2. The residents of Kanpur decide to approach the Chairman of the Municipal Corporation with the problem of pollution in their city. In groups of six, play the role of the following: (Cue cards will be given by the teacher)



- A farmer
- An environmentalist
- Chairman of the Municipal Corporation
- President of 'Save the Ganga Project'
- A Human rights activist

B.3. After the role play, the Chairman will put forward the final decision with reasons.

B.4. As a resident of Kanpur, write a formal letter to the Editor of a prominent newspaper highlighting the problem discussed in B2. Also give some suggestions on how this problem can be reduced.

FORMAL LETTER

A-43 Civil lines
Kanpur

14 January 20..

The Editor
The Times of India
New Delhi

Subject:

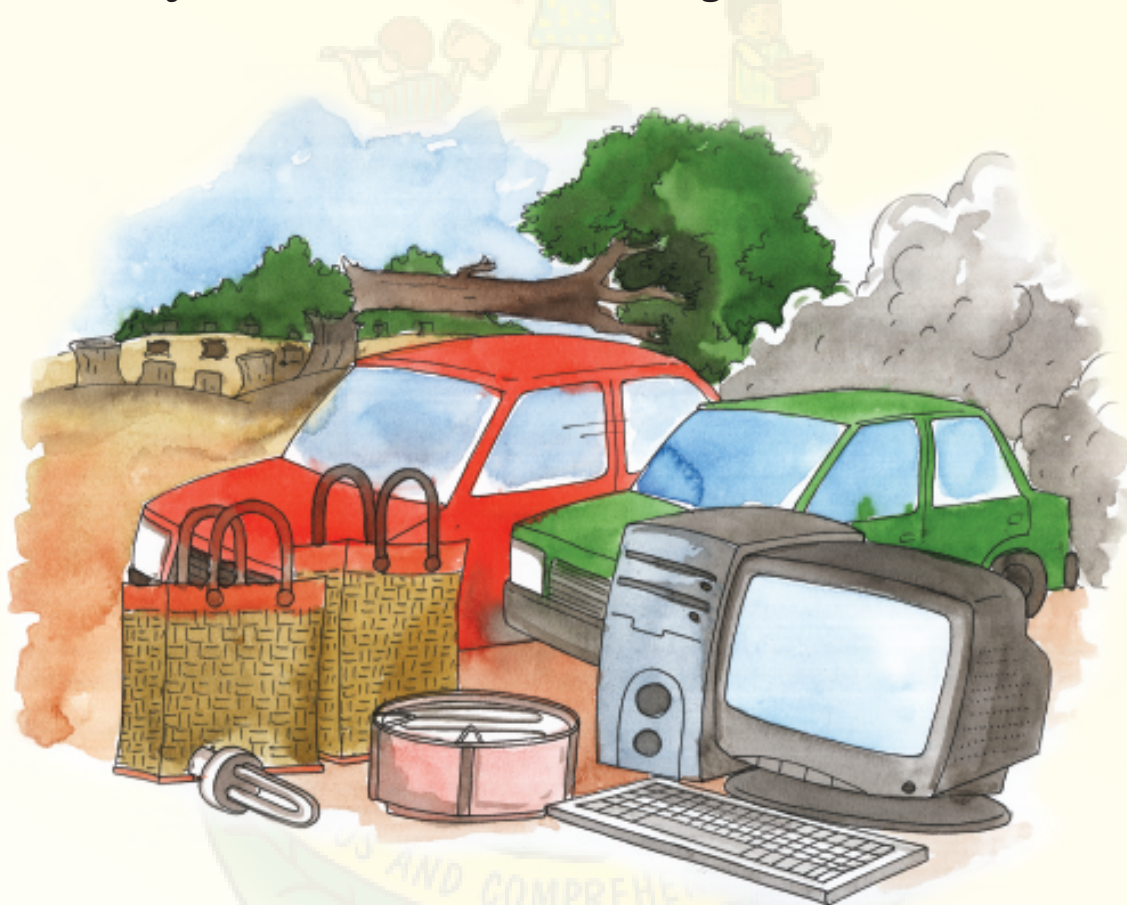
Sir

Body of the letter

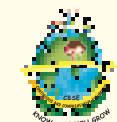
Yours truly
(Name)

B.5. India's Major worries

Read the following paragraph. Then work in pairs and list the different ways in which you can contribute to save Mother Earth. As an individual you can make a major contribution towards reducing India's over all emission levels.

**How to save the Environment at Home**

There are plenty of little steps that people can take at home to help save the environment. While the eco-footprint of each step is small, thousands of people doing the same thing can make a difference. In making some small changes to the way that you do things at home, you are gradually making a difference, even as an individual. You will kill costs and improve your health at the same time, so helping to save the environment isn't a totally altruistic exercise!



SAVE MOTHER EARTH CAMPAIGN

- (a) Turn off the computer when not in use.
- (b) _____
- (c) _____
- (d) _____
- (e) _____
- (f) _____
- (g) _____
- (h) _____
- (i) _____
- (j) _____

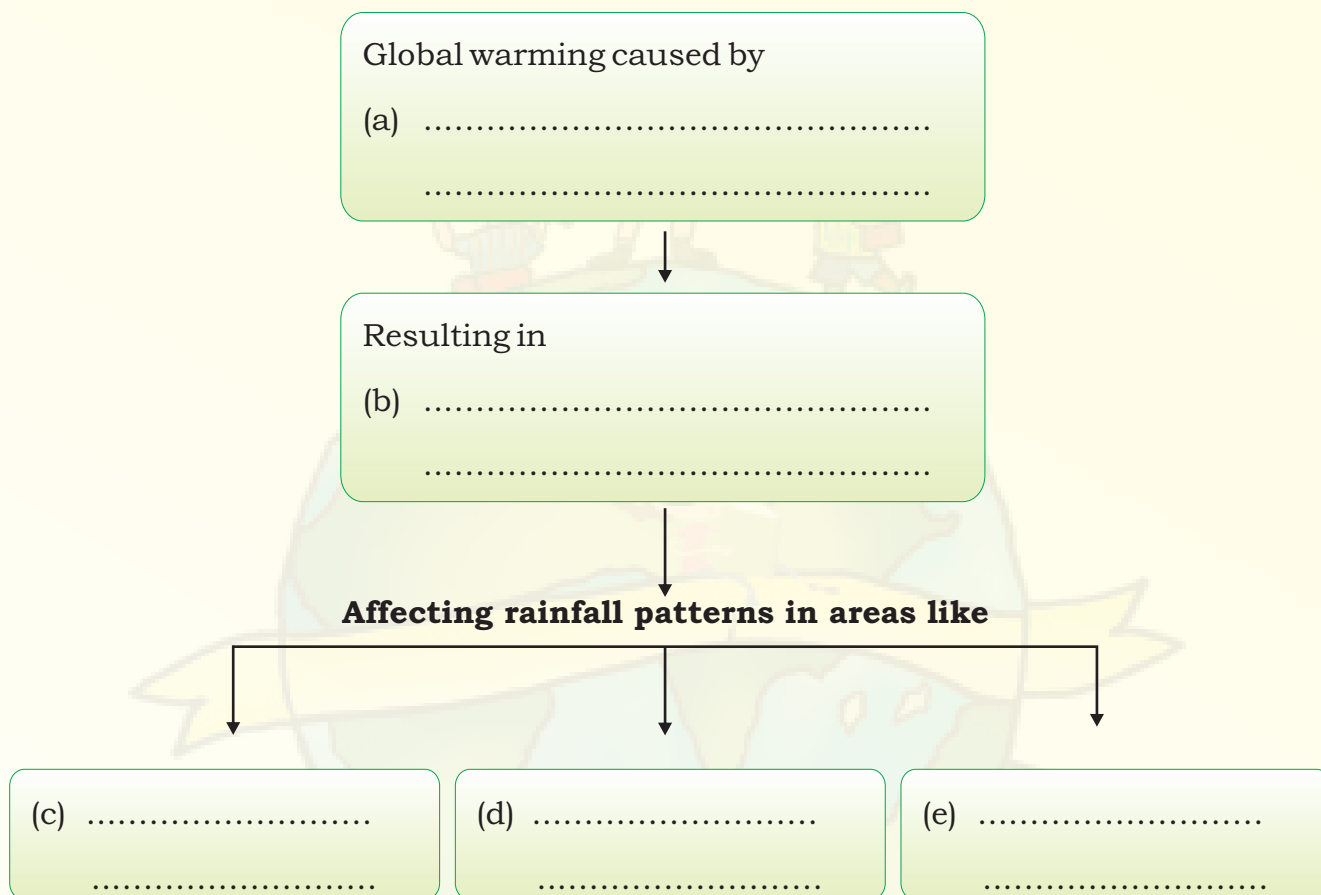
B.6. Read the following article on Global Warming and complete the flow chart given below.

Global Warming is caused by the accumulation of Green house Gases - CO₂, and methane in the atmosphere, resulting in the change of Earth's over all surface temperature. India, a low latitude country, would face much of the misery due to climatic changes. Rainfall pattern is expected to undergo a major change in areas like Kerala, MP and North East.

Himalayan glaciers are melting. This could prove catastrophic for those living downstream in the plains.

Due to global warming heat is trapped in the atmosphere causing the ice to melt. Rising sea levels would inundate many of the coastal cities. Extreme weather conditions such as heavy rainfall are expected to happen resulting in loss of life and property.

FLOW CHART



B.7. Carbon Footprint

Project Work

A carbon footprint is a representation of the effect human activities have on the climate in terms of the total amount of greenhouse gases produced (measured in units of carbon dioxide). So, it is a measure of the impact we make individually on the earth by the choices we make regarding our lifestyle. Many activities generate carbon emissions, which contribute to accelerating global warming and climate change.



Total carbon footprint/emission quantification would include energy emissions from human activities - that is, from heat, light, power and refrigeration and all transport related emissions from cars, freight and distribution.

By measuring the carbon footprint through such tools as carbon calculators, we can get a better sense of what the individual impact is and which parts of our lifestyle deserve the greatest attention.

In groups, choose and research any one aspect of how we are leaving carbon footprints and how to modify our lifestyle. Each group will then make a project on the various aspects.

Read the following excerpts from newspapers on various environmental issues.

Ban the Bag

The Indus Valley Civilisation left beautifully-crafted pottery that speaks volumes of the advances its people made. After 3,000 years, if the ruins we leave behind are excavated, chances are only plastic bags would be dug up. It may sound like an exaggeration, but these bags are not biodegradable. Apart from causing emissions when these are manufactured, noxious fumes are released while these are being burnt or disposed off. So, be kind to Mother Earth the next time you go shopping for groceries, remember to carry a cloth bag with you.



What India Should Do

India has released the National Action Plan on Climate Change. Is it adequate? Is there more that the country can do? Here are some ways how we can make a difference.

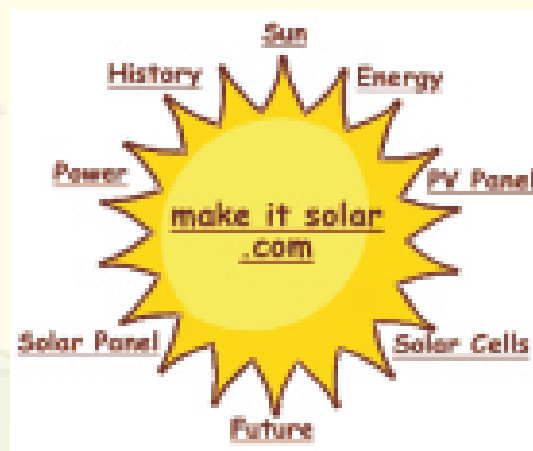


UNIT-3

ENVIRONMENT

(a) SOLAR MISSION

- To promote the use of solar energy through solar photovoltaic and thermal systems for power generation.
- To also integrate other renewable energy technologies like biomass and wind.

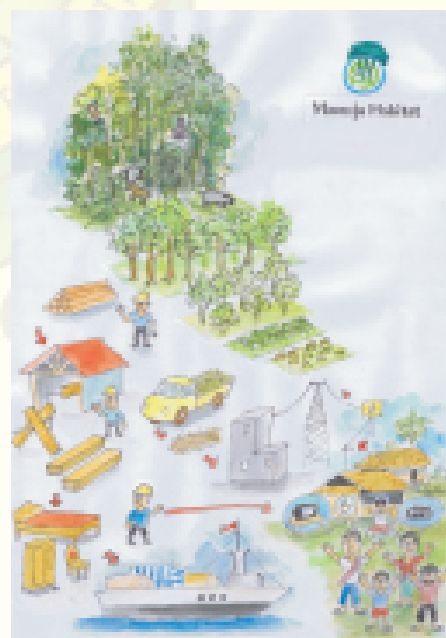


(b) ENERGY EFFICIENCY

- To mitigate GHG through sector-specific and cross-cutting technology and fuel switch options.
- To use more LNG and biomass fuels besides seeking tech transfer.

(c) SUSTAINABLE HABITAT

- To promote energy efficiency in the residential and commercial sectors through LPG use.
- To better manage municipal solid waste and urban public transport.





(d) WATER MISSION

- To promote efficient water use, augment supply in critical areas and ensure effective management of water resources.
- To have better management of surface and groundwater. Also conserve wetlands.

(e) SUSTAINING HIMALAYAS

- To enhance monitoring and conservation of the Himalayan ecosystems, empower local communities for management of ecological resources and promote sustainable tourism.



(f) GREEN INDIA

- To reduce fragmentation of forests, enhance public and private investments for plantation, upscale joint forestry management and promote conservation of biodiversity. Need to afforest degraded lands.

(g) SUSTAINABLE AGRICULTURE:

- To focus on four crucial areas - dry land agriculture, risk management, access to information and promoting the use of biotechnology.
- To develop drought and pest resistant varieties.



B.8. In groups, work on one of the topics mentioned in B8(a)-(g). Research your topic by collecting relevant articles from the print and electronic media (like the National Geographic). Make a power point presentation of 10-12 minutes. You can also use film clippings to enrich your presentation.

C. SAVE THE TIGER

C.1. What is your opinion about 'Animals behind bars'? Share your views with the class.

C.2. Read through the poem and quickly make a note of any thoughts that come to you, while you are reading it.

Dispute

A man and a tiger once had a dispute,
Which was reckoned greater, the man or the brute.
The tiger discoursed on his side at some length,
And greatly enlarged on his courage and strength,
Said the man, 'Don't be prating; look yonder, I pray,
At that sculpture of marble: now what will you say?
The tiger is vanquished; but as for the man,
He is striding upon him: deny if you can.'
'But pray,' said the tiger, 'Who sculptured that stone?
'One of us,' said the man. 'I must candidly own.'
'But when we are sculptors,' the other replied,
'You will then on the man see the tiger astride.'

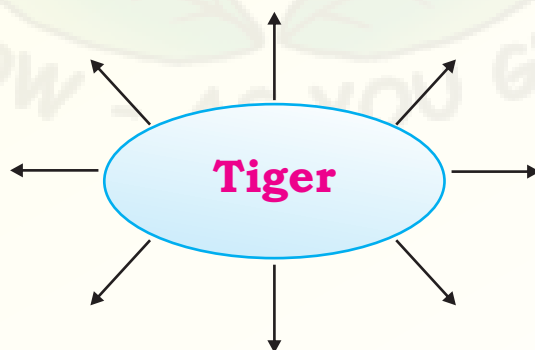


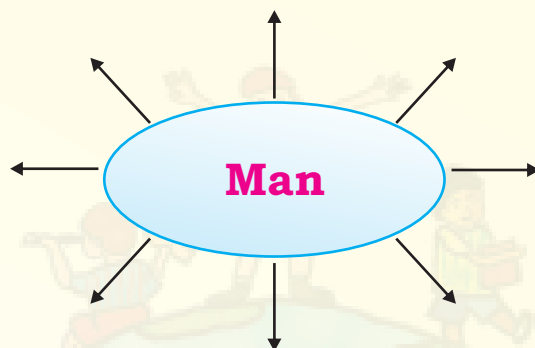
Anonymous

C.3. Answer the following questions by ticking the correct options:

1. What was the cause of the dispute between the tiger and the man?
 - a. to establish who was superior.
 - b. to prove beasts were inferior.
 - c. to justify that beasts should be caged.
 - d. to prove that man was more intelligent.
2. What did the man do to prove his point?
 - a. he caged the tiger.
 - b. he carved a statue of a man riding a tiger.
 - c. he put the tiger in a cage.
 - d. he enslaved the tiger.
3. What was the tiger's counter-argument?
 - a. he said that he was the king of the jungle.
 - b. he claimed he ruled the world.
 - c. he said the situation would be reversed if he was the sculptor.
 - d. he threatened to devour the man in a moment

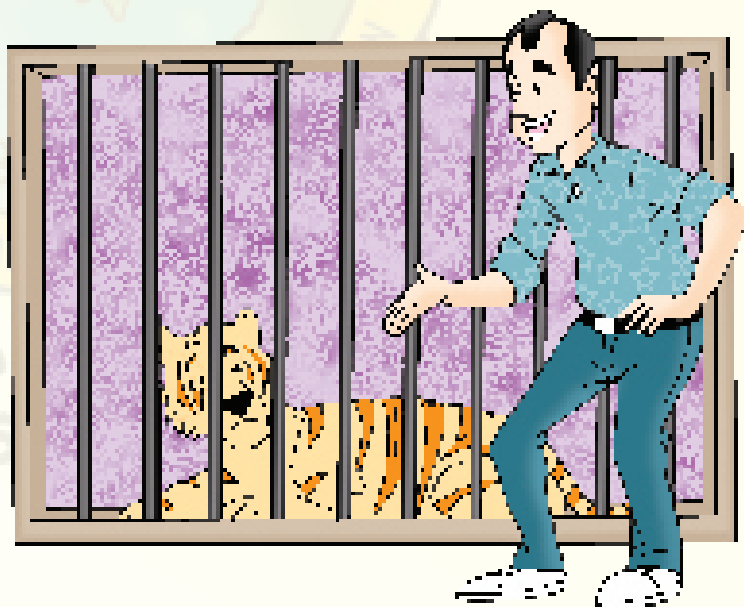
C.4. In pairs discuss the qualities and characteristics of the tiger and the man. Complete the web charts.





C.5. Working in groups of four, write a dialogue between

- A tiger behind bars and a man
- A man in a cage and a tiger.



C.6. Listen to the extract on Tigers and as you listen, complete the summary given below.

C.7. Fill in the blanks :

1. The next generation is not likely to see the tiger because of
2. laws against poachers must be enforced.
3. The responsibility of protection of the tiger lies with the
4. One of the reasons for the Tiger becoming extinct is
5. Destroying nature means
6.,, and are different types of tigers.
7. is a wild life conservation project.
8. Tigers are found in the evergreen and monsoon forests of the
9. Though tigers are mostly nocturnal, species may also be active during the day.
10. The body length of the tiger iscm.



Tiger on the edge, nature on the brink

Interesting facts

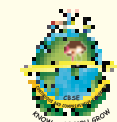
- A tiger has been reported to cover up to 10 meters in a horizontal leap.
- Most tigers have more than 100 stripes, and no two tigers have identical stripes.
- The roar of a tiger can be heard from more than a mile away.
- Tigers are largely muscular and rely on stealth and power rather than on speed to bring down a prey.

C.8. Read the information given below.

Do you know that tigers are the biggest cats in the world? There are five different kinds or sub-species of tiger alive in the world today. Tigers are called *Panthera tigris* in Latin, *Bagh* in Hindi & Bengali, *Kaduva* in Malayalam & *Pedda Puli* in Telugu.

Total Population of Tigers in the world

SUB SPECIES	COUNTRIES	ESTIMATED POPULATION	
		Minimum	Maximum
<i>P. t. altaica</i>	China	12	20
Amur Siberian,	N. Korea	10	10
Manchurian	Russia	415	476
N.E. China Tiger			
TOTAL		437	506
Royal Bengal Tiger	Bangladesh	300	460
<i>P. t. tigris</i>	Bhutan	80	460
	China	30	35
	India	2500	3800
	Nepal	150	250
TOTAL		3060	5005



<i>P.t. corbetti</i>	Cambodia	100	200
(Indo-Chinese Tiger)	China	30	40
	Laos		
	Malasya	600	650
	Myanmar		
	Thailand	250	600
	Vietnam	200	300
TOTAL		1180	1790
<i>P.t. sumatrae</i>	Sumatra	400	500
(Sumatran Tiger)			
TOTAL		400	500
<i>P.t. amoyensis</i>	China	20	30
(South China Tiger)			
TOTAL		20	30
GRAND TOTAL		5097	7831

Extinct Species

P.t. virgata (Caspian Tiger)

P.t. sondaica (Javan Tiger)

P.t. balica (Bali Tiger)

Tiger in Trouble

Since some tiger parts are used in traditional medicine, the tiger is in danger. Apart from its head being used as a trophy to decorate walls, tigers are also hunted for the following.

Head: As a trophy on the wall.

Brain: To cure laziness and pimples.

Teeth: For rabies, asthma and sores.

Blood: For strengthening the constitution and will power.

Fat: For vomiting, dog bites, bleeding haemorrhoids and scalp ailments in children.

Skin: To treat mental illness and to make fur coats.

Whiskers: For toothache.

C.9. After reading the information given in C.8, complete the table given below by filling in the blank spaces.

SUB SPECIES	COUNTRIES	ESTIMATED POPULATION	
		Minimum	Maximum
<i>P.t. altaica</i> Amur	a).....	b).....	c).....
Royal Bengal Tiger	India	d).....	e).....
<i>P.t. corbetti</i> (Indo-Chinese Tiger)	China	f).....	40
<i>P.t. sumatrae</i> Sumatran Tiger	g)	400	h).....

C.10. 'Massive poaching in the past two years has wiped out the entire tiger population at one of the tiger reserves in India,' says one of the investigation reports.

Study the information in C.7 and C.8 and notice how the number of tigers are falling. Using the information, write a paragraph in about 150 words on Project Tiger.

