

READY STEADY KNOW (GENERAL KNOWLEDGE) - CLASS : 1 TO 8 - PORTIONS

SYLLABUS PORTION - CLASS 1 to 8

STD	1 st Mid Term	Term 1 - SA	2 nd Mid Term	Term 2 - SA	3 rd Mid Term	Term 3 - SA
1.	Ch 1. Wild and Domestic Animals		Ch 4. Nature's Creations		Ch 6. Types of Art	
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	Ch 3. Natural and Man-Made Wonders in the Deccan		Ch 7. Forms of Entertainment		Ch 11. Welfare Organisations	
	Ch 4. The Mysteries of the Universe		Ch 8. Indian Writers and Poets		Ch 12. Role of the Government	
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	Ch 2. Disappearing Greens		Ch 6. Indian Art and Sculpture		Ch 10. Sports Played by Various Nations	
	Ch 3. Energy without Harming the Environment		Ch 7. Indian Dance to Music		Ch 11. Story of Europe	
	Ch 4. Wonders - Natural and Man-made		Ch 8. The Entertainers		Ch 12. Non-Government Organisations	
6.	Ch 1. Myths - Tales Surrounding Animals		Ch 5. Fun Time with Maths		Ch 9. Evolution of Language	
	Ch 2. Plants and their Diversity		Ch 6. Schools of Paintings and Sculptures		Ch 10. Sports – Adventure and Bizarre	
	Ch 3. Ecosystems		Ch 7. Come on Everybody Let's Dance		Ch 11. Africa – A Diverse Continent	
	Ch 4. Trail of Indian Wonders		Ch 8. Cinema - Across the Ages		Ch 12. For the Citizens of India	
7.	Ch 1. Biomes with a Special Look at Grasslands		Ch 5. Developing Theories in Science		Ch 9. Awarded With Honour	
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8.	Ch 1. Prehistoric Animals		Ch 5. Biosciences		Ch 9. Literature in India	
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	Ch 4. Wonderfully Wondrous		Ch 8. People Who Make Entertainment Beautiful!		Ch 12. Organisations with a Purpose	
					Ch 13. Poltics of Different Ages	

READY STEADY KNOW - GRADE 1

Chapter 1

WILD AND DOMESTIC ANIMALS

Page 46

1. b. giraffe
2. c. pygmy shrew
3. c. Anaconda
4. d. meat, milk
5. c. Himalayas
6. c. Donkey
7. a. two
8. d. Owl

Project Work

1. A camel is called the ship of the desert because it can easily walk on burning sand. It can also live without food and water for many days in the desert.

2.

Animal	Food	Home	Young one	Special Feature
Polar bear	Seals, Whales, Walruses,	Arctic Circle	Cub	Fur is oily and water repellent
Panda	Leaves, stems and shoots of bamboo	China - in the bamboo forests	Cub	Unique thick black and white fur keeps them cool in the forests.
Asiatic Lion	Antelopes, zebra, goats, deer, pigs, cattle	Gir forest, Gujarat	Cub	Males have a thick mane. They hunt at night
Gorilla	Green plants, fruit	Africa	Infant	Largest of all apes, live in complex social groups
Zebra	Plants, grass	Africa	Cub	Move very fast, unique stripes for camouflage and protection from insect bites; they sleep standing up.

Chapter 2

PARTS OF THE PLANTS

Page 47

1. b. Bark
2. d. Green
3. c. Soil
4. a. Potato
5. d. Fruit
6. a. Seeds
7. c. Creeper
8. b. Wheat

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Project Work

1. To draw the picture of a plant and label its parts. - Student's work
2. Uses of fruits
 - a) They are tasty.
 - b) They provide fibre.
 - c) They provide energy.
 - d) They are good for health.
 - e) They have a pleasant appearance.
 - f) They are easy to eat.
 - g) They can be eaten both raw or cooked.
 - h) There are a large variety of them available.

Chapter 3

OUR ENVIRONMENT

Page 48–49

1. a. oxygen 5. a. Earthworms
2. b. Solar System 6. d. Cow
3. a. Fur coat 7. c. Mauritius
4. b. Producers 8. d. Water and air

Project Work

1.

Force of Nature	Reason for impurity	How it can be stopped
Water	Bacteria, germs, polluting industries	Water treatment, decreasing industrial pollutants
Soil	Bacteria, germs, polluting chemicals	Enriching soil with natural fertiliser, letting soil remain without over cropping
Air	Chemical pollutants, industrial pollutants, diesel fumes, dust, smog	Decrease number of vehicles on roads, decrease chemical and industrial pollutants

2. (Producer) Green plants → (Herbivore) Goat → (Carnivore) Humans

Chapter 4

NATURE'S CREATIONS

Page 49–50

1. c. Majuli 5. c. 97
2. b. Doddabetta 6. b. peak
3. a. Dead Sea 7. d. Narmada
4. b. Mount Everest 8. c. island

Project Work

1. The Alps or the Swiss Alps as they are often called help the Swiss in many ways. They are very scenic and are popular tourist sites. Their rivers, streams and lakes provide fresh and clean water to Switzerland. They have lakes which provide hydroelectric power. Some rivers flow from these mountains and help the people who live in their valleys. The Alps are the home to many diverse plants and animals that contribute to the food and agricultural needs of the people.

2.

Rivers	Islands	Lakes	Seas
Nile	Greenland	Lake Superior	Caribbean Sea
Danube	Great Britain	Lake Michigan	Irish Sea
Thames	Sumatra	Chilka Lake	Red Sea

Chapter 5

LIVING AND NON-LIVING THINGS

Page 50–51

1. b. Air, water 5. b. Duck
2. c. Gills 6. b. Roots
3. c. Breathe 7. d. Stomata
4. d. Bear 8. c. Elephant

Project Work

Living things	Non-living things
They move.	They are stationary unless someone moves them.
They breathe.	They do not breathe.
They need food and water to grow.	They do not grow.

2. A car moves with the help of various parts that work together like wheels, engine etc and with the addition of an energy source like petrol, diesel or electricity.

Chapter 6

TYPES OF ART

Page 53

1. b. Leonardo da Vinci 5. b. Japan
2. a. Nek Chand 6. c. green
3. c. Madhya Pradesh 7. d. Madhubani
4. d. Urdu 8. c. Bharatnatyam

Project Work

1. a. Paris - The Louvre
b. London - British Museum
c. New Delhi - National Museum
d. New York - Metropolitan Museum of Art.
2. a. Bhangra - dance
b. Hindustani - music
c. Pop - music
d. Flamenco - dance
e. Salsa - dance
f. Opera - music

Chapter 7

CELEBRATIONS AROUND THE WORLD

Page 53–54

1. c. May 5. b. Tang
2. d. Tomatoes 6. c. Fruit and sweet buns
3. a. All Saints Day
4. b. Hanami 7. b. 1723
8. d. Onam

Project Work

1. a. Thanksgiving is celebrated in America to thank God for giving many blessings. It was originally celebrated as a harvest festival.
b. The traditional dishes are turkey, cranberry sauce, potatoes, sweet potato casserole, stuffing, vegetables and pumpkin pie.

- c. Children help in preparing the thanksgiving meal. They play outdoor and indoor games with their families. They watch the thanksgiving parade on TV.
2. a. Mother's Day is celebrated by children in honour of their mothers almost all over the world. It was first celebrated, with great enthusiasm, in the USA.
b. It is celebrated to recognise the important roles that our mothers play in our lives.
c. It is celebrated by giving gifts, greeting cards, cooking meals for our mother or taking them out for a meal.

Chapter 8

PLACES AROUND US

Page 54–55

1. b. Hyde Park 5. b. Dubai Mall
2. a. Fresh 6. b. Aquarium
3. d. evenings 7. c. Benches
4. c. Headman 8. d. Petting zoo

Project Work

1. Seema, a young girl, went to stay with her grandmother in the village. She enjoyed walking in the open air and admired the green trees around her grandmother's house. She visited the farmers market with her grandparents. She filled a few buckets of water from the well. She fed the chickens grains. She watered the plants in the garden. She enjoyed herself and decided to visit her grandmother every year.

2.

Village	City
Water well, fields, goats and sheep, orchards, tractors, bullock carts, stacks of hay	Malls, buildings, colleges, playing zones

Chapter 1

WILD LIFE IN THE DECCAN PLATEAU

Page 42–43

1. a. Krishna 4. d. Kashmiri
2. b. bird 5. c. Hyderabad
3. a. Elephants 6. d. Meat of animals
- b. Tigers 7. b. Barasingha
- c. Sloth bears 8. c. Sandalwood

Project Work

1. An elephant uses its trunk to do the following:
 - To breathe as its nostrils are on its trunk;
 - To drink water as it carries water in its trunk and puts it in its mouth;
 - To sniff out things;
 - To greet friends;
 - To comfort each other;
 - To breathe when they swims in water.
- 2.

	Asian Elephant	African Elephant
Areas found	South east Asia including India, Nepal, Sri Lanka, Sumatra	Sub Saharan Africa, South Africa
Size	Male is 2.7 m and female is 2.4 m, smaller than African elephants	One species, the bush elephant is the largest in the world.
Shape and size of ears	Small with folded dorsal borders	Their ears are bigger and reach over the neck.
Tusks	Most females lack tusks, some males lack tusks	Both male and female elephants have tusks

Other useful information	Highly intelligent, quite timid	Highly intelligent, found in the wild
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Chapter 2

VARIETY IN PLANTS

Page 43–44

1. b. herbs 5. d. Cauliflower
2. a. tree 6. b. roots
3. a. Onion 7. c. fertilisers
4. c. Venus Flytrap 8. a. Rose

Project Work

1. If all the seeds fell under the parent plant there would be overcrowding. This will decrease chances of growth. It will decrease natural resources available. It will also not spread far and wide.
2. Yes. Many animals and insects spread seeds. The wind spread seeds. Some examples are elephants eat fruits and disperse their seeds in their droppings. Monkeys eat fruits and disperse their seeds. Even ants drop some of the seeds on the way as they carry them to their homes and help in dispersion.
- 3.

Nature's Helpers	How they spread seed
Animals	Through their droppings; seeds also get tangled in animal fur or skin
Birds	Through their droppings, when they eat only part of the fruit at distant places.
Wind	Strong winds carry seeds over short or long distances.
Water	Seeds float in water and are carried to new places

Chapter 3

ENCHANTING ENVIRONMENT

Page 44–45

1. c. herbivores
2. d. Plastic bags
3. b. Water is heated and changes to water vapour.
4. a. winter months
5. a. The sun
6. b. carnivores
7. c. Flowers
8. a. Mud

Project Work

	Autumn	Spring
Months of the year	September (Northern Hemisphere), March (Southern Hemisphere)	March to June in the Northern Hemisphere, September, October, November in the Southern Hemisphere
Kinds of clothes worn	Neither warm nor cold fabrics, light sweaters	Light and cool fabrics.
Effect on trees	Leaves start falling	Flowers start blooming
Other information	Pleasant weather	Pleasant weather

Chapter 4

WONDERS OF THE WORLD

Page 46–47

1. d. Brazil
2. d. Harpy eagle
3. a. United States of America
4. c. American Indians
5. b. piranha
6. a. corals
7. c. Mount Everest
8. c. Australia

Project Work

1. It is important to protect marine life in our oceans. French Polynesia is a beautiful group of islands in the Pacific. Many years ago nuclear tests were carried out. The natural habitat

needs to be saved and all future tests should be banned.

2.

Name and location	Kodaikanal, Tamil Nadu
Flora and fauna of the region	Eucalyptus trees, Shola forests
Unique features of the region	Kodaikanal Lake, Bryant Forest
Threats that the flora and fauna face	Over development
What can be done to protect the flora and fauna	Sustainable tourism, plant native trees

Chapter 5

THE HUMAN BODY

Page 47–48

1. b. cerebrum
2. a. mouth
3. c. oesophagus
4. d. tongue
5. b. The small intestine
6. d. 30
7. b. thigh bone
8. b. skeleton

Project Work

Animals	Food	Types of teeth/ reason
Lion/tiger	Meat	Strong, sharp teeth incisors, to cut and tear meat
Elephant	Grass, plants, barks.leaves	Strong teeth to chew and to tear leaves, bark etc
Sheep/ goat	Grass, shrubs, hay etc, goats also eat almost anything if you let them	Large molars for grinding and chewing food
Rat/mice	Grains, fruits, will eat meat etc if available	They have both incisors and molars for cutting food and for chewing food

Chapter 6

FORMS OF ART AND INDIAN ART STYLES

Page 48–49

- c. Maharashtra
- b. Madhubani
- a. simple stick figures
- b. Miniature paintings
- a. Ajanta caves
- b. Kumbh Mela
- c. Painter
- a. Bani Thani

Project Work

I would like to make baskets, flowers, butterflies, bunnies, cranes cups and other animals using origami.

Origami	
Popular in which countries	China, Korea, Japan, all over the world
Names of famous artists	Robert J Lang, Akira Yoshizawa, Kade Chan
Types of origami	1. Action origami 2. Modular origami 3. Wet folding origami 4. Pureland origami 5. Origami tessellations 6. Kirigami
Different models that can be made	Rose, swan, cubes, elephant, dog, butterfly,

Chapter 7

CULTURAL DIVERSITY IN INDIA

Page 50–51

- b. Sanskrit
- c. sari
- a. Christianity
- d. church
- b. epics
- a. October 2
- a. Snake
- b. 12 years

Project Work

	My state	Any other stat
Name of the state	Tamil Nadu	Gujarat
Languages spoken	Tamil, English	Gujarati, Hindi
Food	Idli, Dosa, Rice dishes, Sambar, Rasam, Vada, Murukku etc	Rice dishes, Khichdi, Dhokla, Thepla, Shrikhand
Important Festivals	Pongal, Vinayaka Chaturthi, Karthigai Deepam	Navrathri, Holi, Janamashtami
Traditional clothes	Lungi/veshti, shirt, sari	Dhoti, kurta, turban, cap, sari
Music and dance	Carnatic music, Villu Paatu, Bharatanatyam, Karagattam	Bhavai, Temple music, Garba,
Other information	Famous temples and beaches	Famous wildlife sanctuary and beaches

Chapter 8

ENTERTAINMENT AND FORMS OF ENTERTAINMENT

Page 51–52

- c. Douglas Engelbart
- c. Dadasaheb Phalke
- c. Rugby
- b. Mortimer
- b. Tinkle
- d. James Bond
- b. circus
- d. school

Project Work

- The student goes for a walk in the park with friends.
-

Name of the insect	Wings/No wings	Number of legs	Other information	Disney Name
Ladybug	Four	Six	Colourful appearance	Lynda Ladybug
Butterfly	Four	Six	Many types	Brenda Butterfly

Cricket	no wings, two wings, four wings	Six	Males make a chirping sound	Charlie Cricket
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Chapter 9

BOOKS, HOW READING HELPS!

Page 52–54

1. c. English
2. a. Hedwig
3. d. rabbit
4. b. Huckleberry Finn
5. Roald Dahl
6. a. diary
7. a. Rudyard Kipling
8. b. Pirates

Project Work

Month and day	Interesting happenings	New things learnt
October 2	Celebrated Gandhi Jayanthi in our colony	Learnt about spinning cotton with Chakra
October 5	Celebrated our neighbour's grandson's birthday	His grandparents visited them from Kolkata. They described the city.
October 6	Celebrated my birthday with my neighbours and friends	My neighbours gifted me delicious sweets called Sandesh, a special Bengali sweet.

Chapter 10

SPORTS IN INDIA

Page 54–55

1. b. Chess
2. d. Kerala
3. a. martial arts
4. b. Kabaddi

Project Work

Name of the leader	Achievements	The state he/she belonged to	Education and other information
Alok Sagar	Works for tribals	Helping in Madhya Pradesh	Engineering degree from IIT Delhi. Planted more than 50,000 trees
Dr. Bhakti Yadav	Treating patients for free from the 1940's	Helping in Uttar Pradesh and Madhya Pradesh	Gynaecologist

5. c. Tennis
6. d. None of these
7. c. Boxing
8. a. cricketer

Project Work

1. Name of the game
 - City, State, Country
 - It is a game played with two players.
 - It needs twenty numbers of each of the vowels and ten number of each of the consonants as tiles.
 - Each player gets 10 tiles and they have to make the name of a city or state or country.
 - Each time they do so, they get points depending on the number of letters they use in the name.
 - They can change two tiles at a time, alternately.
 - The game ends in thirty minutes and points are added.
 - The player with the highest points is the winner.

Chapter 11

PROMINENT RULERS OF INDIA

Page 55–56

1. a. A set of rules to run the country
2. a. Vallabhbhai Patel
3. d. Maharana Pratap
4. b. 40 kmph
5. b. Indira Gandhi
6. a. Jawaharlal Nehru
7. b. Sarojini Naidu
8. b. APJ Abdul Kalam

Chapter 1

SANCTUARIES AND NATIONAL PARKS

Page 37–38

1. d. Uttarakhand
2. a. Nilgiri
3. b. heaviest
4. c. Kerala
5. a. Lion
6. a. Kerala
7. b. goat
8. b. Kerala

Project Work

1. Tigers, gaur, sambhar, chital, mouse deer, four-horned antelope, wild dogs, wild boar, sloth bear, panther, malabar squirrel and porcupines.
2. Mysore, Bengaluru, Ooty, Coonoor,
3. The tiger is the most majestic animals that lives in the Bandhipur National Park. These tigers have large hind legs and claws that help them to leap forward, up to distances of 10 metres. The Bandhipur National Park, with its natural reserves and flora and fauna, is an ideal home for the tigers. There is plenty of food as there are animals in the park, which are small and large prey.

The government of India has initiated 'Project Tiger' in the park. Their natural habitat is maintained and tourism is controlled by the forest department.

Chapter 2

VEGETATION OF THE DECCAN PLATEAU

Page 38–39

1. c. thick, needle-like leaves
2. c. Cactus
3. a. black
4. c. Saffron
5. d. All of the above
6. a. Iron
7. b. Eucalyptus
8. c. Tibetan Plateau

Project Work

Name of the plant	Medicinal Use
Mimosa pudica	To treat piles
Hibiscus angulosus	To treat blood pressure
Cinnamomum zeylancium	To treat diabetes
Gloriosa superba	To treat jaundice, gout etc

Chapter 3

CARING FOR OUR ENVIRONMENT

Page 39–41

1. b. everything on the planet earth
2. a. air pollution
3. a. bacteria
4. b. Earthworms
5. c. Both a and b
6. c. Both a and b
7. a. more waste
8. a. Global warming

Project Work

Some of the things I can do is to spend time outdoors, use the air conditioner only when necessary, instead use fans.

The odd and even rule does decrease air pollution; however, it must be implemented properly. It is better to improve public transport so that less cars and bikes are on the roads.

Activity	What I can do
Conserve water	Not use running water while brushing teeth, use one bucket of water not many to bathe
Save electricity	Switch off lights and fans when anyone leaves the room.
Reuse and recycle garbage	Use cloth bags instead of paper and plastic, separate garbage and recycle it

Chapter 4

MAN-MADE WONDERS OF THE WORLD

Page 41–42

1. b. architecture
2. c. entertainment
3. c. Both a and b
(*correction in text book:
(Option a. **Paul Landowski**)
4. a. 1634 (**The right answer is 1632....1634**
closest to correct answer)
5. c. Both a and b
6. c. 50,000 people
7. a. 2500 years ago (closest correct answer)
The right answer is 2242)
8. a. pollution

Project Work

Characteristics	Machu Pichu	Petra
Location	Peru	Jordan
Made in the year	15 th century	312 BC
Features	Example of Inca architecture, almost 2500 metres above sea levels, made with polished stone,	Tombs and temples have been beautifully carved into stone cliffs, these pink cliffs have give it the nickname Rose city, built by the Nabateans of Arabia.

Chapter 5

MARVELS OF MEDICINE

Page 42–44

1. b. bone marrow
2. c. William Harvey
3. b. prevent diseases
4. b. India

5. a. over the counter drugs
6. b. Homeopathy
7. a. Tulsi
8. a. remedies

Project Work

Name of the vaccine	Disease prevented	Age at which it is given
BCG	Tuberculosis	At birth
OPV - Zero	Polio	At birth
Hepatitis B	Hepatitis	At birth
DPT	Diphtheria, Tetanus, Whooping Cough	6 - 14 weeks
IPV-1	Polio	6-14 weeks
HiB-1	Pneumonia, Epiglottitis	6-14 weeks
Hepatitis B	Hepatitis	6-14 weeks
PCV-1	Pneumonia, Meningitis, Sepsis	6-14 weeks
Rotavirus	Diarrhoea	6-14 weeks
OVP-1	Polio	6 months
Hepatitis B	Hepatitis	6 months
MMR-1	Measles, Mumps, Rubella	9 months
OVP-2	Polio	9 months
Typhoid-1	Typhoid	9-12 months
Hepatitis A	Polio	12 months
MMR-2	Measles, Mumps, Rubella	15 months
PCV Booster shot	Polio	15 months
Varicella-1	Chicken Pox	15 months
DTwP/DTaP Booster shot	Diphtheria, Tetanus, Whooping Cough	16-18 months
IPV Booster shot	Polio	16-18 months
HiB Booster shot	Pneumonia, Epiglottitis	16-18 months

Hepatitis A -2	Hepatitis	18 months
Typhoid Booster shot	Typhoid	2 years
DTwP/DTaP	Diphtheria, Tetanus, Whooping Cough	4-6 years
OPV	Polio	
Varicella	Chicken Pox	
Typhoid Booster	Typhoid	
DTwP/DTaP	Diphtheria, Tetanus, Whooping Cough	10 years
HPV	Genital warts and some types of cervical cancers	10 years - for girls only

Chapter 6

ART ON DIFFERENT MEDIUMS

Page 44–45

- a. walls of caves
- a. Rituals of the entire village
- c. Kalamkari
- a. Rules followed by ancient artists
- a. rock cuttings
- b. stick figures
- a. Bihar
- a. miniature paintings

Project Work

The Indian state famous for glass painting	Gujarat
Country where the styles came from	China

Materials required	Glass painting outliners, glass paints, glass patterns, glass pieces, markers, brushes, thinners and tracing paper
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Chapter 7

A LINK TO OUR CULTURE

Page 46–47

- c. Damru
- a. By word of mouth
- a. Sarod
- c. Nataraja
- b. Garba
- a. Shehnayi
- b. Rangoli
- b. Jataka Tales

Project Work

Name of craft	Wood craft
State of its origin	Karnataka
Why it is vanishing	Diminishing supplies of rosewood from forests, decrease in number of craftsmen

Chapter 8

OLD AND NEW ENTERTAINMENT

Page 47–48

- a. Horse in motion
- c. Zorbing
- a. Fairy tales
- b. India
- b. Gladiators
- c. Bears
- d. None of these
- b. Opera

Project Work

Practical project

- Unable to create a script as unable to describe 2. and 3. as text/content
- Unable to create text
- Unable to create a stage as text

Chapter 9

TYPES OF LITERATURE AND POEMS

Page 48–50

- | | |
|-----------------|-------------------|
| 1. b. Fiction | 5. b. Dr. Seuss |
| 2. c. student | 6. a. Roger Moore |
| 3. b. 25 pounds | 7. b. limerick |
| 4. a. Italy | 8. a. elegy |

Project Work

My uncle is an interesting man. He studied law.

He has always had a positive effect on people. He helps poor people free of charge. He contributed money and resources to build educational institutions. He provides scholarships for meritorious students.

He is humble, yet intelligent. He is generous. He takes on cases which can even cause him harm as his opponents are sometimes powerful and connected people who use influence to misuse the laws of the country.

The Thirukkural

The Thirukkural or Kural as it's sometimes called, is one of the most famous Tamil literary books. Valluvar or Thiruvalluvar as he is often called wrote this book thousands of years ago. It is a masterpiece and is famous for its secular writing.

It has 133 chapters each containing 10 couplets. Each couplet is called a kural. It has three main chapters that deal with virtue, wealth and love. Although it is part of Tamil Sangam literature its secular message has relevance especially in modern divisive times. It is a prominent reminder of not just Tamil but Indian values and ethics.

Chapter 10

SPORTING TERMINOLOGY AND SPORTING GROUNDS

Page 50–51

- | | |
|-------------------|---------------------|
| 1. b. Baseball | 5. a. Greater Noida |
| 2. a. Tennis | 6. a. Kolkata |
| 3. b. Maharashtra | 7. c. Cricket |
| 4. c. boxing | 8. c. zero score |

Project Work

Three advantages of watching a match at a stadium

1. Enjoying live action in front of your eyes.
2. Seeing your favourite sportspersons playing in front of you.
3. Taking part in your favourite activity together with a crowd of fellow enthusiasts.

Three disadvantages of watching a match at a stadium

1. Stadium could be far away and tickets are expensive.
2. The stadium is big so the players look small and the action cannot be as clearly as on tv.
3. It may get very noisy and tough, when the entire crowd responds to positive and negative outcomes in the game.
 - a. The last game I saw in a stadium was a cricket match.
 - b. I prefer to watch the game on my home theatre system as the stadium is far away. It is also crowded and it is definitely easier to see the game on the television screen which gives a clearer picture.
 - c. Yes, we do need more stadiums as there are many enthusiasts who like to watch games in stadiums.

Chapter 1

SOME ENDANGERED SPECIES - INDIA

Page 58–59

1. c. International Union for Conservation
2. b. Human threats
3. c. Ganges river dolphin
4. c. Pride
5. Options are incorrect - right answer is 19th May
(*correction in text book:
(Option a. 19th May)
6. c. 530
7. d. None of these
8. c. Deforestation
9. b. Nearing extinction

Project Work

IUCN Red List India

The different categories of threatened species are as follows

- Extinct
- Extinct in the wild
- Critically endangered
- Endangered
- Vulnerable
- Near threatened
- Least concern

The list of endangered animals in India as per IUCN is as follows.

Critically Endangered Mammals

1. Himalayan Brown/Red Bear
2. Pygmy Hog
3. Andaman White-toothed Shrew
4. Kondana Rat
5. Large Rock Rat or Elvira Rat
6. Namdapha Flying Squirrel
7. Malabar Civet
8. Sumatran Rhinoceros

9. Kashmir stag /hangul

Endangered Mammals

1. Red Panda
2. Wild ass/khur
3. Dhole/Asiatic wild dog/Indian wild dog
4. Eld's deer/thamin or brow-antlered deer
5. Golden langur
6. Himalayan/white-bellied musk deer
7. Hispid hare/Assam rabbit
8. Hog deer
9. Lion-tailed macaque/ wanderoo
10. Chita/Tibetan Antelope
11. Nilgiri langur/Nilgiri leaf monkey
12. Nilgiri tahr

Endangered marine mammals

1. Freshwater/river dolphin

IUCN runs several thousands of field projects all over the world to manage natural environments in a better manner.

Chapter 2

VEGETATION OF INDIA

Page 59–60

1. a. Kunthi
2. c. Trees
3. d. Teak
4. a. thorn
5. c. Mangrove
6. c. Mangrove and Tidal plants
7. a. iron
8. b. Rice

Project Work

The Chipko Movement began in the 1970's, with

organised resistance to the cutting of forest trees all over India. Chipko means to embrace or to stick. Villagers hugged trees; hereby preventing contractors from cutting them down.

The movement to save trees has an ancient history in India during the early part of the 18th century, when the Bishnoi community of Rajasthan protected trees from being felled on the orders of the Maharaja of Jodhpur. Led by a strong woman called Amrita Devi, this movement resulted in the loss of their lives but their sacrifices brought forth the importance of conservation in India.

The first Chipko movement in the 20th century took place in April 1973 in the village of Mandal and spread to many villages in Uttar Pradesh and the Himalayan regions, leading to conservation of the forests.

The Chipko movement inspired many similar movements in other parts of the country as well as in many places around the world. Many conservationists and leaders at the grassroots have helped to lead and sustain the movement which has been the strongest one to decrease deforestation and increase afforestation.

Chapter 3

NATURAL AND MAN-MADE WONDERS IN THE DECCAN

Page 60–61

- | | |
|-------------------|-----------------------|
| 1. a. Borra | 5. b. Ellora |
| 2. b. Britain | 6. c. Bhimbetka |
| 3. a. Maharashtra | 7. c. Buddhist |
| 4. b. rock | 8. a. shadow puppetry |

Project Work

The Ellora caves in Aurangabad are also known as Verul Leni by the locals. These inspiring caves are among the largest rock hewn temple complexes in the world. The great Kailasa, Cave 16, is the largest single monolithic excavation in the world.

These caves are hewn into the hills of the Sahyadri mountains of the Deccan. The basaltic formation is ideal for such rock hewing and the ancients in India were aware of this. In fact three major religions, Buddhism, Jainism and Brahminism are represented here. Buddhism is represented the most, in 900 of the around 1200 caves present in this historic complex.

The Ellora caves have also been near trade routes; therefore they have always been visited and have been a vibrant part of India's culture and heritage through the ages.

Chapter 4

Question Time

Page 61–62

- | | |
|--------------|------------------|
| 1. c. galaxy | 5. a. 2061 |
| 2. a. Venus | 6. c. Venus |
| 3. a. Mars | 7. d. comet |
| 4. b. Comets | 8. b. Copernicus |

Project Work

Mangalyaan

The Mars Orbiter Mission MOM or Mangalyaan as it is also called was launched by ISRO as India's first venture into interplanetary space.

The mission of this venture is to explore the minerals, the atmosphere and the surface of Mars. It was launched on November 5, 2013 from the Satish Dhawan Space Centre in Andhra Pradesh using a PSLV rocket C25.

Mangalyaan has taken beautiful and precise, high quality images of the full disc of Mars. The photos of the red planet taken by it have offered glimpses of the planet and has increased our knowledge about it.

Mangalyaan has scripted space history and has put India in an elite club of space explorers. Another mission Mangalyaan 2 has been proposed for launch in 2020.

Chapter 5

ART AND SCULPTURE IN INDIA

Page 62–63

- | | |
|--------------------|--------------------|
| 1. a. Indus Valley | 5. d. Jataka Tales |
| 2. a. Delhi | 6. d. Pali |
| 3. c. Ashoka | 7. a. Madurai |
| 4. b. Stupa | 8. b. Delhi |

Project Work

The student can take pictures of the various temples, sculptures and art forms present in the city in which they live in. For Chennai, Mahabalipuram or Mamallapuram is a suggestion; write captions and describe each of them in a few lines.

Chapter 6

FOLKLORE AND FOLK ART IN INDIA

Page 63–64

- | | |
|------------------|-----------------------|
| 1. b. Tamil Nadu | 5. c. Buddha |
| 2. a. Gonds | 6. a. Narayana Pandit |
| 3. b. women | 7. b. Kaitha |
| 4. a. Kali | 8. a. Rajasthan |

Project Work

Folklore and folk art in Tamil Nadu is vast. Many stories can be narrated by the children. They can also draw pictures of folk art in their notebooks.

Chapter 7

FORMS OF ENTERTAINMENT

Page 65

- | | |
|--|-----------------|
| 1. c. Radio Club of India | 2. a. Akashvani |
| 3. b. Delhi (// *correction in question - 15 th September 1959) | |
| 4. a. 1936 | 5. a. teachers |

- | | |
|---------------------|----------------|
| 6. a. You Tube | 8. a. INSAT-1A |
| 7. c. Animal Planet | |

Project Work

My favourite channel is the History Channel. It has many wonderful programmes. I like the programmes: 101 gadgets that changed the world and Food Tech. History channel makes me aware of the wonderful world we live in. It also keeps me up to date on modern inventions.

Chapter 8

INDIAN WRITERS AND POETS

Page 66–67

- | | |
|---------------------|---------------------------|
| 1. b. Ramayana | 5. a. Rabindranath Tagore |
| 2. a. Nimantran | |
| 3. c. R. K. Narayan | 6. a. Sarojini Naidu |
| 4. c. R. K. Laxman | 7. a. Rudyard Kipling |
| | 8. c. Kamala Das |

Project Work

Ruskin Bond

Ruskin Bond is a popular author of children's books. He was born in India and is of British descent. As a young man, he began writing short stories and poems which were accepted for publications.

He has been living in Mussoorie, Uttarakhand from 1963. He has many publications on various topics; however he is most popularly recognised as a writer of children's stories. He has experimented with various genres; writing fiction, short stories, novellas and essays. He says that his favourite genres are essays and short stories.

Ruskin Bond has received high honours including the Padma Bhushan in 2014. His character Rusty is a popular one and is featured in many books. The character has some shades of the author's personal life and experiences. These books are based on the hills around his home.

Chapter 9

SPORTS IN INDIA

Page 67–68

- | | |
|------------------------|-------------------------------------|
| 1. c. Sachin Tendulkar | 5. a. Rajiv Gandhi Khel Ratna Award |
| 2. a. Polo | |
| 3. a. golf | 6. a. hockey |
| 4. c. boxer | 7. c. UK |
| | 8. b. boxing |

Project Work

Viswanathan Anand

Vishwanathan Anand is one of the most famous chess players in the world. Born in Chennai, on December 11, 1969, Vishy, as he is fondly called, began playing chess at the young age of six, with his mother as his teacher.

In 1984 he won the Asian Junior Chess Championship. In 1987 he was the first Indian to win the World Junior Chess Championships. He won the FIDE World Chess Championship in 2000, for the first time. He blazed ahead winning many more world championships and awards.

He has been awarded the Padma Bhushan and was also the first recipient of the Rajiv Gandhi Khel Ratna Award.

Chapter 10

ASIA – A CONTINENT OF CONTRASTS

Page 68–69

- | | |
|--------------|--------------------|
| 1. b. Russia | 5. a. Afghanistan |
| 2. c. China | 6. b. Mahakali |
| 3. a. Sahara | 7. a. Saudi Arabia |
| 4. c. Dubai | 8. a. Tibet |

Project Work

Ganga Treaty 1996

The Ganga Treaty of 1996 provides for the distribution of water to India and Bangladesh. It is a 30 year comprehensive treaty. Although there are complaints on both sides, the treaty is still in effect.

Chapter 11

WELFARE ORGANISATIONS

Page 69–70

- | | |
|--------------------|--|
| 1. c. Rippan Kapur | 6. a. Children |
| 2. a. 1993 | 7. b. National Human Rights Commission |
| 3. b. PETA | |
| 4. b. not allowed | 8. c. Animal Welfare Board of India |
| 5. c. Judges | |

Project Work

PETA

PETA is based in Mumbai India. It believes that animals are not ours to eat, wear, experiment on, use for entertainment or abuse in any way.

It has many volunteers worldwide. Some famous personalities are their brand ambassadors. It is possible to adopt an animal by connecting with PETA through its website or office.

Chapter 12

ROLE OF THE GOVERNMENT

Page 70–71

- | | |
|----------------------|-----------------|
| 1. c. President | 5. c. Delhi |
| 2. c. Rajya Sabha | 6. c. Delhi |
| 3. b. Lower house | 7. b. President |
| 4. a. Prime Minister | 8. b. President |

Project Work

Lok Sabha TV

Lok Sabha TV is the Parliament channel of India. It telecasts live the proceedings of the Lok Sabha - the Lower House of the Parliament.

When the Lok Sabha functions in Parliament, generally the first hour is devoted to questions and is called Question Hour.

When the Parliament is not functioning, the channel broadcasts debates, discussions, documentaries and award winning films in different regional languages of India.

Chapter 1

AMAZING WORLD - MARINE LIFE AND INSECTS

Page 59–60

- | | |
|----------------|-------------------------|
| 1. a. Ganga | 5. c. Beetles |
| 2. b. Mammals | 6. c. Luciferin |
| 3. c. Carapace | 7. a. Abdomen |
| 4. a. Smallest | 8. b. Hydrogen peroxide |

Project Work

1. Bees are flying insects that help in pollination. There are almost twenty thousand known species of bees. Honey bees produce natural honey for their own use and store it in their hives. As they fly from flower to flower they collect nectar and convert it to delicious honey. Bees live in colonies and divide their work. They are considered to be efficient team players.

Ants are insects who work hard. They are social creatures. They are organised and build their own societies where they function as units; however, they don't provide humans with natural foods like honey.

2. The US Navy has trained dolphins (bottle nosed) to detect mine locations and recover objects. They also assist in finding lost swimmers. Dolphins also ride along the side of ships to preserve their energy.
3. Sea lions (Californian sea lion) are also used to recover objects, mine detection and recovery and ship and harbour protection.

Chapter 2

DISAPPEARING GREENS

Page 60–61

- | | |
|--------------------|-------------------|
| 1. b. Sakura | 5. b. Kiwi |
| 2. b. Kenya | 6. b. Angiosperms |
| 3. b. Ginseng | 7. c. Kola nut |
| 4. d. Chhattisgarh | 8. a. Zucchini |

Project Work

Many cultures and people worldwide celebrate harvest festivals. Harvest festivals are celebrated all over India. Some of the popular ones in India are

- Pongal, Tamil Nadu
- Vishu and Onam, Kerala
- Lohri, Punjab and North India
- Bihu, Assam
- Gudi Padwa, Maharashtra, Karnataka
- Vasant Panchami, Gujarat, West Bengal
- Holi, most of North and West India

Chapter 3

ENERGY WITHOUT HARMING THE ENVIRONMENT

Page 61–62

- | | |
|--------------------|------------------|
| 1. c. France | 5. b. mechanical |
| 2. c. Beijing | 6. c. Brazil |
| 3. c. Natural gas | 7. c. India |
| 4. b. windless day | 8. c. Carbon |

Project Work

Make a solar cooker with help from You Tube

A lot of research is being carried out around the world to efficiently and ecologically store energy. Some of the promising research as of now is

- Battery storage for residential rooftop solar panels in Germany
- Ext generation electric vehicle batteries in the United States
- Supergen Energy Storage Hub in the UK.

Chapter 4

WONDERS - NATURAL AND MAN-MADE

Page 62–63

- | | |
|-----------------------|--------------------|
| 1. b. Banni | 5. b. Odisha |
| 2. b. Elephant | 6. b. Mohenjo-daro |
| 3. b. Mesozoic | 7. b. Bijapur |
| 4. c. Lal Chand Ustad | 8. b. Ellora |

Project Work

Magnetic Hill, Ladakh

There is a magnetic hill in India which is located in Leh, Ladakh. This area and its surrounding slopes create an optical illusion such that vehicles on the hill appear to be moving uphill, in defiance of gravity, although they are actually moving downhill.

Kailash Temple, Ellora

The Kailash Temple is a part of the Ellora caves complex. This huge, ancient Hindu rock cut temple is a megalith that has been carved from a single rock. It is an architectural and sculptural marvel.

It is said to have been constructed in the 8th century by King Krishna 1 of the Rashtrakuta dynasty in 756-773 CE. It is cave number 16 and is a part of the 32 cave temples and monasteries that form the Ellora Temple Complex.

Ranakpur Jain Temple, Rajasthan

The Ranakpur Jain Temple, dedicated to Thirthankara Rishabhanatha, is in Rajasthan. It was built by Dharna Shah, a local Jain businessperson, following a vision, where he was instructed to do so. It was built under the patronage of Rana Khumba.

It is made of light coloured marble. It has 1444 pillars that are exquisitely carved and each one is different from the other. The entire complex, with its intrinsic architecture and beautiful idols, has been well maintained as renovations have been carried out from time to time.

Marble Rocks, Jabalpur

The Marble Rocks are a natural gorge that are situated along the path of the Narmada River in Madhya Pradesh near Jabalpur.

These beautiful white marble rocks are rich in magnesium and almost as hard as soapstone. This makes it easy to carve them with just a scalpel. This area also has brown and blue coloured marble.

Marble Rocks, Jabalpur are scenic and have formed the backdrop for popular movies. There are many tourist attractions including cable cars, boat rides and small shops filled with local arts and crafts

Chapter 5

EXPLORING BEYOND OUR EARTH

Page 63–64

- | | |
|---------------------|-----------------------------|
| 1. b. Chandrayaan 1 | 5. c. European Space Agency |
| 2. a. Sputnik | 6. c. Comets |
| 3. b. Vikings | 7. b. Neptune |
| 4. b. Pluto | 8. b. Uranus |

Project Work

Constellations in the sky

A constellation is a group of stars that forms a specific shape made with imaginary lines. Humans have made many of these constellations in the shape of animals, mythological gods, mythological creatures and mythological figures.

Constellations in the sky vary in shape and size. In 1928, 88 modern constellations have been recognised by the International Astronomical Union (IAU). Their brightness varies and the view of the sky at night varies, depending on the earth's position around the sun.

Conditions needed for life to evolve

Some scientists and researchers say that the following are needed for life to evolve on our planet earth.

- Water
- Energy
- Time
- Recycling

These are the main factors necessary for life as we know it; however as research continues more factors and conditions are emerging which may add to the conditions needed for life to evolve.

Kuiper Belt and Oort Cloud

The Kuiper Belt is a disc shaped region beyond the orbit of Neptune. It contains many icy bodies. Some short period comets also emerge from this region. It is estimated that there are around 35,000 objects in the Kuiper Belt.

The Oort Cloud is a theoretical cloud of small icy objects and has been named after the Dutch astronomer Jan Oort. The Oort cloud is divided into two regions: an inner disc shaped inner Oort cloud and a spherical shaped outer Oort Cloud. It could be the source of long period comets.

The Wow Signal

On August 15, 1977 the Big Ear radio telescope, University of Chicago, United States, received a strong narrow band radio signal. It seemed to come from the Sagittarius constellation and indicated it was of extraterrestrial origin.

An astronomer Jerry R Ehman was the first to notice an anomaly in the signal and wrote Wow! on the side of the computer printout of this signal. This is how the Wow signal originated.

The Wow signal has been considered as one of the strongest indications of extraterrestrial life; however, Professor Antonio Paris, of St. Petersburg College, explained that the signals were from a pair of comets.

Although the Wow signal is not an indicator of extraterrestrial origin, SETI (Search for Extraterrestrial Intelligence Institute uses many advanced telescopes and other equipment in its quest to find intelligent life elsewhere in our vast cosmos.

Chapter 6

INDIAN ART AND SCULPTURE

Page 64–65

- | | |
|----------------------|---------------|
| 1. c. Nalanda | 5. b. Bhakti |
| 2. b. Shankaracharya | 6. b. Hampi |
| 3. c. Chola | 7. c. Dilwara |
| 4. d. Gupta | 8. b. Nalanda |

Project Work

The Bhakti movement is said to have originated in South India and then moved upwards encompassing the country. It pointed out the silliness of the caste system. It believes in one personal God. It believes

that both men and women are equal in God's sight. The famous personalities of the Bhakti movement are

- Alvar Saints
- Nayanar Saints
- Ramanuja
- Ramananda
- Kabir
- Nanak
- Chaitanya Maha Prabhu
- Vallabhacharya
- Dadu Dayal
- Mira Bai
- Tulsidas
- Surdas
- Maluk Das
- Sundardas
- Bhirban

The Bhakti movement by the saints and sadhus is indeed a superb blessing for Indians. It needs to spread throughout the country to bring peace, harmony and goodwill among humans.

Chapter 7

INDIAN DANCE TO MUSIC

Page 65–66

- | | |
|-----------------|--------------------|
| 1. c. Kuchipudi | 5. b. Vasudev |
| 2. b. Bhangra | 6. b. Vijayanagara |
| 3. b. Hasya | 7. a. Tandav |
| 4. b. Khayal | 8. d. Bharatnatyam |

Project Work

The Carnatic Music Trinity

Three outstanding music composers-musicians of the 18th century are called the Carnatic Music Trinity. They are Tyagaraja, Muthuswami Dikshitar and Syama Sastri. Their compositions are distinct and they introduced innovations in the same raga. Incidentally, all three of them were born in Thiruvallur, Tamil Nadu.

Tyagaraja and Syama Sastri mainly composed in Telugu, while Muthuswami Dikshitar mainly compose in Sanskrit. The uniqueness of their compositions still

gladdens the hearts of music lovers.

Some of the famous compositions by Tyagaraja

- Ghana Raga Pancharatnam
- Thiruvotriyur Pancharatnam
- Kovur Pancharatnam
- Shriranga Pancharatnam
- Lalgudi Pancharatnam

Some of the famous compositions by Syama Sastri

- Navaratnamalika
- Ratnatrayam
- Varanam in Chintamani raga
- Varanam in Kalagada

Some of the famous compositions by Muthuswami Dikshitar

- Mahaganapati Kritis
- Guruguha Kritis
- Kamalamba Navavarma Kritis
- Navagraha Kritis

The Carnatic Trinity have composed hundreds of compositions for almost all the major temples and deities in Southern India.

Chapter 8

THE ENTERTAINERS

Page 66–67

- | | |
|---------------|-----------------------|
| 1. b. Pixar | 5. b. Mark Zuckerberg |
| 2. c. Mysore | 6. b. Gnorm Gnat |
| 3. c. Marathi | 7. b. Elvis Presley |
| 4. c. Brown | 8. a. John Denver |

Project Work

Steve Jobs

Steve Jobs was born in San Francisco on February 24, 1955. He was the cofounder, CEO and chairman of Apple Inc. In 1976 he started Apple with Steve Wozniak. He was the designer and marketing of this very successful brand of computers.

He worked with Apple Inc., left the company, bought Pixar Animation Studios and some years later rejoined Apple. He has led an eventful life and

is known for the flair with which he introduced innovative and unique products from Apple like the iPod, the iPad and the iMac.

He passed away on October 5, 2011.

Satya Nadella

SatyaNadella was born on August 19, 1967 in Hyderabad, India. He studied at the Manipal Institute of Technology, Mangalore University, the University of Wisconsin, Milwaukee and the University of Chicago.

He worked with Sun Microsystems before joining Microsoft. He became the CEO of Microsoft on February 4, 2015 succeeding Steve Ballmer. He is one of the most successful engineers of Indian origin.

Mark Zuckerberg

Mark Zuckerberg was born on May 14, 1984. This American computer programmer and entrepreneur is widely recognised as the face behind Facebook, one of the most popular social networking sites worldwide.

Mark Zuckerberg is a cofounder, the current chairman and the CEO of Facebook. Facebook was first launched as a social network in the Harvard campus on February 4, 2004 by Zuckerberg from his dormitory room. Its popularity was such that it soon reached other campuses and it now popular all over the world with all age groups.

Bill Gates

William Henry Gates III or Bill Gates as he is popularly known as was born on October 28, 1955. In 1975 he, along with Paul Allen, founded Microsoft Corporation.

Bill Gates is one of the pioneers of the Personal Computers PC revolution and Windows by Microsoft is used worldwide. In 2000 he became a philanthropist by establishing the Bill & Melinda Gates Foundation which is the world's wealthiest charitable foundation.

He has written two books: The Road Ahead with Nathan Myhrvold and Peter Rinearson and Business @ the Speed of Thought.

Chapter 9

BOOKS OF FAME

Page 67–68

1. c. Kolkata
2. b. Belgian
3. d. Fox terrier
4. b. Ann Sewell
5. d. Murder at the Vicarage
6. a. Italian songstress
7. b. Pickwick Papers
8. a. Daniel Defoe

Project Work

Literature has changed our way of thinking. It can represent not only our world to us but can also show us how to change it or how to adapt to it.

Some books highlight the ills and wrongdoings that take place in society; thus bringing about a change for better, when governments or NGOS or people work together to right these wrongs.

Books showcase the culture, the history and the geography of various countries. By reading about their diverse cultures, we can make efforts to understand people who are different from us and coexist peacefully and happily.

Many books can affect us. Biographies, autobiographies, fiction, scientific books, whichever book we may read, they will affect us whether it is consciously or subconsciously or unconsciously.

Charles Dickens characters have had both a general and specific impact on society. All his characters focussed on the state of society and the impact of a few among the many characters he used for reform are mentioned below.

His character Joe, in the Pickwick Papers, is fat and sleepy. Dickens descriptions of this character's symptoms etc lead to the advent of a new field of study in medicine i.e. sleep disorders.

In The Life and Adventures of Nicholas Nickleby, he highlights the poor treatment of children in schools where anyone could become a headmaster and how poverty and sub standard education existed without checks and balances.

In Oliver Twist, he highlights the exploitation of children and how they are not just used as a cheap labour force but are also mistreated and made to work under abject conditions.

He was a social reformer, who not only brought about awareness but also helped develop homeless shelters for women and the first paediatric hospital in the UK. He also helped in the development of orthopaedics.

Chapter 10

SPORTS PLAYED BY VARIOUS NATIONS

Page 68–69

1. b. Hamilton
2. c. Madrid
3. c. South Africa, England, Australia
4. c. China
5. b. England
6. b. 1975
7. c. Canada
8. b. Rawalpindi Express

Project Work

Polo

Origin

Polo originated in Persia.

Rules

Players score goals by driving a small wooden or white plastic ball into their opponent's goal, using a long mallet, while riding on horseback.

Best players

1. Adolfo Cambiaso
2. Carlos Gracida
3. Facundo Sola

Rugby

Origin

Rugby originated in England.

Rules

Rugby is played by two teams with 15 players. You have to use the ball to score points. You can kick it, pass it, run with it to score.

Best players

1. Paul O'Connell
2. Shane Williams
3. Johnny Wilkinson

Hockey

Origin

Field hockey originated in England.

Rules

Each team plays with eleven players including the goalie. Players use sticks to hit a round plastic ball into the goal to score points. The goalie tries to prevent the ball from reaching into the goal.

Best players

1. Dhyan Chand
2. Ric Charlesworth
3. Luciana Aymar

Chapter 11

STORY OF EUROPE

Page 69–70

- | | |
|-------------------|-----------------------|
| 1. d. Bunol | 5. b. The Last Supper |
| 2. d. Pilsen | 6. b. Zeus |
| 3. b. Scandinavia | 7. b. Johanna Spyri |
| 4. b. Beethoven | 8. d. Seine |

Project Work

Louvre Museum Paris

The Louvre Museum in Paris, France is the world's largest museum. It has about 38,000 objects on display, at any given time, dating from prehistoric times to the twenty first century.

It has over 50,000 pieces from the Nile civilisation that flourished along modern day Egypt. It also has the 18th century BC mural of the Investiture of Zimrimlim. The 25th century BC Statue of Ebih II from the ancient city of Mari (Mesopotamia) is also on display at the museum.

The Louvre museum also has many famous works of art including Mona Lisa, which is perhaps the most recognised painting in the world.

Chapter 12

NON-GOVERNMENT ORGANISATIONS

Page 70–71

- | | |
|------------------|----------------------|
| 1. c. Pakistan | 5. b. HelpAge India |
| 2. b. Alaska | 6. c. Wildlife India |
| 3. c. Kolkata | 7. b. J H Dunant |
| 4. c. Greenpeace | 8. b. Switzerland |

Project Work

Some of the suggested NGOs for students

- | | |
|------------------|--------------|
| 1. HelpAge India | 3. Red Cross |
| 2. Blue Cross | 4. PETA |

Chapter 13

INDIA – FUNCTIONING AT THE ROOTS

Page 71–72

- | | |
|-----------------------------|---------------------|
| 1. b. five | 5. b. five |
| 2. a. Mayor | 6. b. Gram Swarajya |
| 3. b. Greek | 7. b. 21 |
| 4. b. Municipal Corporation | 8. b. Collector |

Project Work

The city of Chennai is governed by the Greater Chennai Corporation. It was earlier called the Corporation of Madras. It is the oldest municipal body among those in the Commonwealth excluding Great Britain. The oldest corporation in the world is London and the second oldest is Chennai!

It is headed by the mayor, who is assisted by 200 councillors representing 200 wards in Chennai. It was formed in 1688. It has three regions: North Chennai, Central Chennai and South Chennai. Each region has 5 zones and there are totally 15 zones.

The Corporation maintains the road lights, the street lights and the flyovers. There is also a local park and a health centre nearby. The schools run by the corporation are a few kilometres away.

Chapter 1

Myths - Tales surrounding animals

Page 6–7

- | | |
|-----------------------|----------------------|
| 1. b. Changpa | 5. c. Sri Lanka |
| 2. c. mammals | 6. b. Blue Whale |
| 3. b. crow | 7. a. Mariana Trench |
| 4. b. Central America | 8. b. Octopus |

Project Work

The Rabari, the Banni and the Ahir are some of the tribals who look after birds as they follow a migratory route across Kutch. They protect the natural habitat of birds and do not allow the use of harmful pesticides which can poison the natural plants that are the food of the birds. Their organic lifestyle and reduced carbon footprints also help in protecting these birds.

Chapter 2

Plants and their diversity

Page 11–12

- | | |
|-----------------|-------------------|
| 1. b. Socotra | 5. a. Indian |
| 2. b. Laxmi | 6. a. nitrogen |
| 3. d. Ayurveda | 7. d. Neem |
| 4. c. Mistletoe | 8. c. cockroaches |

Project Work

Two myths about plants

1. In England, the holly plant was used as a charm by young girls to reveal the identity of their future husbands; however, it wasn't successful.
2. In India, Hindus believe that plants with trifoliate leaves are associated with the Trimurthi: Brahmna, Vishnu and Shiva. Such leaves are offered in worship.

Two myths about flowers

1. It is believed that the Buddha originally appeared floating on a lotus.
2. The Romans associated the rose with death and rebirth.

Chapter 3

Ecosystems

Page 17

- | | |
|---------------------|------------------|
| 1. c. Producers | 5. a. Canopy |
| 2. b. South America | 6. c. symbiotic |
| 3. c. Brazil nut | 7. b. Blue Whale |
| 4. c. Alaotra Grebe | 8. b. Atacama |

Project Work

There are many factors that affect an eco system. They can be classified as direct factors and indirect factors.

Direct factors

- Change in the habitat
- Climate Change
- Exploitation of natural resources
- Pollution
- Threats by invasive species

Indirect factors

- Population
- Economic changes
- Socio political changes
- Science and technology
- Religious and cultural factors

Chapter 4

Trail of Indian wonders

Page 20–21

- | | |
|---------------|---|
| 1. b. 52,000 | 6. a. Magnetic |
| 2. b. Arizona | 7. b. Greenland |
| 3. b. Bananal | 8. e. Jamuna (this option is not available in the text Page 20) |
| 4. a. Cochin | |
| 5. a. Hirakud | |

Project Work

1. About fifty two thousand years ago a meteor crashed into Maharashtra in a place called Lonar, which is close to Aurangabad. Its impact was felt in many parts of Maharashtra.
2. The impact created a huge hole in the earth and this area is called Lonar Lake.
3. The weight of the meteor is said to be 2 million tonnes. It had a speed of 90,000 km/hr.
4. Meteors have hit earth and have been recorded; however a few asteroids have also had an impact on earth and recently space debris from crashing satellites, rockets etc also fall back to earth or to the oceans.
5. Yes they cause some damage to life on earth.
6. Leonids are spectacular meteor showers seen in the month of November. They are associated with the comet Temple-Tuttle.

Chapter 5

Fun time with Maths

Page 25–26

- | | |
|--------------------|-----------------|
| 1. b. Nobel Prize | 5. b. Galileo |
| 2. b. 90 degrees | 6. c. Norwegian |
| 3. b. Aryabhatia | 7. c. Greek |
| 4. a. Issac Newton | 8. c. Google |

Project Work

Archimedes Principle

Archimedes Principle is called the law of buoyancy. It states that any body that is partially or completely submerged in a fluid (liquid or gas) at rest is acted upon by a buoyant, upward force, the magnitude of which is equal to the weight of fluid displaced by that body.

Archimedes Screw

It was used to transfer water from a low lying water body to irrigation channels or to drain out water from mines.

Fibonacci Numbers

These numbers follow a sequence where every number after the first two numbers is the sum of the two preceding ones.

1, 1, 2, 3, 5, 8, 13, 21, 34, 55

Chapter 6

Schools of paintings and sculptures

Page 31

- | | |
|--------------------|------------------------|
| 1. b. Kalighat | 5. b. Mathura |
| 2. b. Bhimbetka | 6. b. John Whistler |
| 3. b. John Smith | 7. a. The Lion Capital |
| 4. b. Anish Kapoor | 8. c. Tanjore |

Project Work

- a. Asoka
Ashoka created the Ashoka Chakra, The Lion Capital of Sarnath and the Ashoka Pillar.
- b. Indus Valley Civilisation
The Priest King and The Dancing Girl are famous sculptures. Seals, toys and jewellery have also been excavated from the sites.
- c. Rashtrakutas
Ellora and Elephanta caves were renovated by them. The Kailash Nath temple, the largest monolithic temple, is associated with them.
- d. Satavahanas
The earliest Satavahana inscription is found in Nashik Cave 19. Some inscription also appears on the Stupa 1 at Sanchi.

Chapter 7

Come on everybody let's dance!

Page 36

- | | |
|--------------------|---------------------|
| 1. b. Ravi Shankar | 5. c. Alfalfa |
| 2. c. ABBA | 6. b. Birju Maharaj |
| 3. b. Bharatnatyam | 7. a. Bhangra |
| 4. b. Anna Pavlova | 8. b. Flamenco |

Project Work

Some of the popular folk dances in India:

- | | |
|-------------------|-------------|
| Assam | - Bihu |
| Jammu and Kashmir | - Rouff |
| Punjab | - Bhangra |
| Uttar Pradesh | - Ras Leela |
| Gujarat | - Garba |

Rajasthan	-	Ghoomar
Maharashtra	-	Lavani
Kerala	-	Kanniyar Kali
Tamil Nadu	-	Karakattam

Chapter 8

Cinema - Across the ages

Page 40

- | | |
|-------------------------------|----------------------|
| 1. c. The Great Train Robbery | 5. b. Julie Andrews |
| 2. c. Pandora | 6. b. JK Rowling |
| 3. c. Lord Shiva | 7. b. France |
| 4. a. Raja Harishchandra | 8. d. Brothers Grimm |

Project Work

History of Indian Cinema

1913 Raja Harishchandra - Dadasaheb Phalke - Silent Film

1917 Nal Damyanti - J F Madan first regional film - Bengali

1919 Keechaka Vadham R Natraja Mudaliar first regional Tamil film

1931 Alam Ara - Ardeshir Irani - first sound film

1947 -1960 Directors like Satyajit Ray and Mrinal Sen, Religious movies, Patriotic movies

1970 onwards Masala and entertainment movies with music and dance

1980 onwards many women directors enter the field

2000 onwards block buster movies, advance special effects

Chapter 9

Evolution of language

Page 43

- | | |
|--|--------------------------|
| 1. b. Devanagari | 4. a. Hangal |
| 2. b. proto-language | 5. c. Mandarin (Chinese) |
| 3. c. Panini | 6. b. Devabasha |
| 7. b. Hebrew (not proven historically according to many) | |
| 8. b. Iraq | |

Project Work

The English language has its origins in Germany when Anglo-Frisian dialects were brought to Britain by Germanic settlers and invaders in the mid 5th to 7th century.

It has changed over six centuries due to the influence of other languages on it.

English literature is very vast. Geoffrey Chaucer, William Shakespeare and Charles Dickens are among its most influential writers. In modern times JK Rowling is the most popular English writer.

Chapter 10

Sports - Adventure and bizarre!

Page 47

- | | |
|--|-----------------|
| 1. b. Puck | 5. b. Rishikesh |
| 2. b. Gulmarg | 6. d. Himalayas |
| 3. b. writer | 7. a. Karate |
| 4. b. oscillates | |
| 8. e. Snake (*Correction in textbook: Options are incorrect - The right answer is snake) | |

Project Work

Some of the sports played at The Olympics

Most sports that are played in the Olympics are sports which are played by many countries all over the world. That is why adventure and bizarre sports are rarely if ever introduced in the Olympics.

Some of the major sports played in the Olympics

- | | |
|--------------|---------------------|
| • Aquatics | • Hockey |
| • Archery | • Judo |
| • Badminton | • Karate |
| • Baseball | • Modern Pentathlon |
| • Basketball | • Rowing |
| • Boxing | • Rugby |
| • Canoe | • Sailing |
| • Cycling | • Shooting |
| • Equestrian | • Skateboarding |
| • Fencing | • Sport Climbing |
| • Football | • Surfing |
| • Golf | • Table Tennis |
| • Gymnastics | • Taekwondo |
| • Handball | • Tennis |

- ▼ Track & Field
- Triathlon
- Volley Ball
- Weightlifting
- Wrestling

Chapter 11

Africa - A diverse continent

Page 52

1. b. Homo habilis
2. e. 63 percent in 2015 (all the choices in the text are irrelevant)
3. b. Cocoa
4. b. Bushmen
5. a. Deforestation
6. c. Water
7. c. Ebola
8. b. Afrikaans (correct spelling, wrong spelling in the text)

Project Work

Tribes of India

There are 645 district tribes in India.

The Todas are one among the 36 tribes in Tamil Nadu. They live in the Nilgiris. They live in settlements called mund. They are pastoral. The Toda dress consists of a single piece of cloth worn over a dhoti for men and a skirt for women with a shalya wrap.

They are vegetarians. They have a holy milkman who acts like their priest. Their language belongs to the Dravidian family. They are known for their unique crafts especially embroidery.

Chapter 12

For the citizens of India

Page 56

1. c. Narendra Modi
2. c. Gujarat
3. b. 1988
4. a. Saakshar Bharat
5. c. Madras
6. d. Kerala
7. c. Kerala
8. b. Scholarship

Project Work

Save the Children

They stand up for a children's rights. They help in health and nutrition, education, children protection and emergencies.

CRY (Child Rights and You)

They work to secure, protect and honour the rights of children.

Smile Foundation

Although they focus on the education of the child, they also look after relevant issues in the children's the family like health, skills etc which have an impact on their education.

Chapter 13

Pillars of administration

Page 60–61

1. b. Constable
2. c. Prime Minister
3. b. District Judge
4. b. Media
5. b. 5
6. b. Director General of Police
7. c. Chennai
8. b. H J Kania

United States of America

The government is a federal government and has three branches.

1. The executive power invested in the President
2. The legislative power invested in the Congress (House of Representatives and Senate)
3. The judicial power invested in the Supreme Court and other federal courts created by the Congress.

United Kingdom

The Prime Minister is the head of the country and leads the government with the support of the Cabinet and Ministers. The Parliament consists of The House of Commons and The House of Lords. It is separate from the government and looks at what the government does, sets taxes, debates issues and passes laws. There is a civil service and local councils to help in the functioning of the country.

READY STEADY KNOW - GRADE 7

Chapter 1

Biomes with a special look at Grasslands

Page 8–9

1. c. Greenland 2. b. Antarctica

3. c. Amazon
4. c. Steppes
5. b. Elephant
6. b. Argentina
7. c. Atacama

8. b. Cactus
9. b. Rhinoceros
10. d. Rainforest
11. c. Rann of Kutch
12. b. Hwange

Project Work

Biome	Characteristics	Plants	Animals	Conservation efforts
Taiga	Covered with glaciers, called snow forests	Pines, spruce, larch	Moose, Siberian Tigers, Bears, Lynx, Owls. Eagles	Trees shouldn't be cut down. Decrease in logging helps to conserve the forests. Climate change is affecting the region.
Tundra	6 months daylight, 6 months darkness, coldest and harshest biome	Cushion plants, wild flowers in summer	Arctic Foxes, Polar Bears, Grey Wolves, Caribou, Snow Geese, Musk-Oxen	Global warming is affecting this region. It used to be a carbon sink but is now a carbon contributor due to climate change.
Desert	Hot or Cold	Different cacti, wildflowers, tumbleweed, Mexican poppies	Lizards, Gila Monster, Bobcats, Coyotes, Sheep, Rats, Antelopes	Global warming and wild fires are affecting the region.
Mediterranean	Woodlands and scrub forests, dry summers, rainy winters	Chaparral, shrubs and woodlands, olive groves, cork forests	Wild goats, sheep, cattle, horses, donkeys, rabbits, vultures	Reduce pollution, proper management of water bodies and industrial development has to be undertaken.
Tropical Rainforest	Rains almost everyday	Different layers with different plants adapted to each layer	Almost half of the world's animals are found here.	Deforestation and climate change are affecting the biome.
Temperate Rainforest	4 distinct seasons: Spring, Summer, Autumn, Winter	Mosses, ferns, lichens, spruce, hemlock, conifers, deciduous trees	Beavers, racoons, cougars, bears, redwood	Deforestation and climate change are affecting the biome.
Aquatic Biomes	Responsible for water cycle, rains and atmospheric moisture	Water lilies, reeds, algae, duckweed, cattails	Whales, sea otters, fish, molluscs, crustaceans	Invasive species, overfishing, pollution and climate change are affecting the biome.

2. Both South Africa and Zimbabwe have formulated national forest policies to protect the veldts. Research projects on the trees, ecology conservation, silviculture and protection are some of the research based programmes. Both these governments have set aside large tracts of lands to be conserved without degradation. Hunting and pastoral grazing have been controlled.

Chapter 2

Save our Earth

Page 15

1. b. Bhopal
2. b. disinfectant
3. c. Gulf of Mexico
4. c. nitrogen and phosphorus
5. b. Aral Sea
6. c. Africa
7. b. Sunderbans alternate answer c. Ganges
8. b. Greenpeace
9. b. fossil
10. b. Yamuna

Project Work

1. Although the exact factors that caused ice ages and the glacial cycles that have occurred within them are not known, some of the probable causes include a complex interaction of factors like the distance of the earth from the sun, the solar output, ocean circulations, the position and heights of the continents and atmospheric composition.
2. There are many natural and native pesticides used in India. Some of them are
 - Go Mutra (Cow urine)
 - Neem and neem extracts
 - Chilli garlic extract
 - Dasaparni (an extract made from 10 different leaves)

They are easily available and rejuvenate the soil. They are natural compounds and are biodegradable.

3. Some plants that absorb large amounts of carbon dioxide are the following.
 - Aloe
 - Asparagus
 - Rubber tree
 - Cacti
 - Chlorophytum
 - Clivia
 - Monstera
 - Pachira
4. Some trees that absorb large amounts of carbon dioxide are
 - Yellow Poplar
 - Silver Maple
 - Oak
 - Horse Chestnut
 - Mulberry
 - London Plane
 - American Sweetgum
 - Dogwood
 - Blue Spruce
 - Pines

Chapter 3

Life Elsewhere?

Page 20

1. a. Messenger
2. b. Viking 1 (partially wrong answer in the text)
3. b. Ohio
4. b. 17500
5. c. Aztecs
6. b. 1100
7. d. Pluto
8. b. Halley's
9. c. Neptune
10. c. Blue (correct answer white...closest answer blue)

Project Work

1. The 12 constellations were suggested by ancient astronomers. They have more relevance in astrology when compared with modern day astronomy. They can be seen at different places in the night sky, at different times for people who live on the same longitude but the same night sky can be seen by people living on the same latitude.

The different signs of the Zodiac as they were called by the ancients and their biggest and brightest stars are as follows, in alphabetical order.

1. Aquarius - Alpha Aquarii or Sadalmelik
 2. Aries - Alpha Arietis or Hamal
 3. Cancer - Beta Cancri
 4. Capricorn - Deneb Algedi
 5. Gemini - Pollux
 6. Leo - Regulus
 7. Libra - Beta Librae
 8. Pisces - Eta Piscium or Alpherq or Kullat Nunu
 9. Sagittarius - Epsilon Sagittarii
 10. Scorpio - Antares
 11. Taurus - Aldebaran
 12. Virgo - Spica
2. The Pole Star or Polar Star or Polaris is located in the Ursa Minor constellation. It is visible to the naked eye. As it remains in a fixed position in the night sky, it is used as a guide for navigation.

Chapter 4

Natural and Man-made Wonders

Page 26–27

- | | |
|---------------------|--------------------|
| 1. d. Harry Truman | 7. b. Flavian |
| 2. a. Yellowstone | 8. c. Seven |
| 3. c. Feldspar | 9. c. Media |
| 4. d. Alice Springs | 10. a. Mesopotamia |
| 5. d. Zambezi | 11. c. Doric |
| 6. b. Angel Falls | 12. a. 776 BCE |

Project Work

Five other wonders of the Ancient World are the following.

The Great Pyramid at Giza

It is the oldest and largest among the three pyramids at the Giza complex. It has royal chambers like the King's Chamber, the Queen's Chamber. It is quite well preserved. It is near Cairo. A large statue called the Sphinx guards the entrance of all the pyramids in Giza.

The Temple of Artemis at Ephesus

It is in ruins with only its foundation and a few fragments intact, though it was a magnificent marble structure in ancient times. Ephesus is in modern day Turkey. It was rebuilt thrice, before it was finally destroyed.

The Mausoleum at Halicarnassus

It is also in modern day Turkey. It was built for a Persian governor or satrap around 350 BC. It was made of white marble. It was partially destroyed by an earthquake and finally destroyed by the Crusaders.

The Colossus of Rhodes

It was a statue of the Greek God Helios, the Sun God. It was erected in Rhodes in 280 BC. It was one of the tallest statues of the ancient world.

The Lighthouse at Alexandria, Egypt

It was also called the Pharos of Alexandria. It is believed to have had a height between 120 to 137 metres. It is said that its light, from a reflective mirror, was visible 35 miles away. It was reduced to pieces by two earthquakes.

Chapter 5

Developing Theories in Science

Page 32

- | | |
|------------------|-----------------------|
| 1. a. 8 | 5. b. Egyptians |
| 2. d. southeast | 6. a. Polish |
| 3. b. geocentric | 7. d. Ganymede |
| 4. c. Andromeda | 8. b. Hans Lippershey |

9. a. Englishman
10. a. Le Verrier and b. Johann Galle (both are considered to be the discoverers of Neptune)

Project Work

It is an ancient Hindu style and system of architecture. There are eight directions in Vaastu Shastra. It is an ancient science that was practised in India and is still followed by some Indians. It defines and shapes spaces in accordance with energies and magnetic fields, for a positive life according to some people. It is supposed to bring harmony to dwellings and is popular in India.

Chapter 6

Changing World of Art

Page 36–37

1. e. Caravaggio (answer not available in text)
2. c. Madras (Chennai)
3. b. Baroque
4. c. Dutch
5. c. Renoir
6. a. Michelangelo
7. b. Michelangelo
8. c. Milan
9. c. French
10. c. Louvre

Project Work

Greek Art	Roman Art
They used white marble.	They used white marble
Stylised beautiful features in statues	Realistic statues
Used marble, wood and brick	Used concrete as well brick

Chapter 7

Art and Music - The Heart of India

Page 42–43

1. b. Samovar
2. b. VS Gaitonde
3. b. Swadeshi
4. c. Shamikshawad (correct spelling)
5. b. Assam
6. c. Pandharpur
7. b. Rashtrakutas
8. c. Kuchipudi
9. c. Bihu
10. a. Villupattu

Project Work

1. Mark the following states and their folk dances on a map of India.

Arunachal Pradesh	-	Bardo Chham
Assam	-	Bagurumba, Bhortal Nritya, Bihu
Chhattisgarh	-	Raut Nacha
Goa	-	Fugdi
Gujarat	-	Dandiya Raas, Garba, Tippani Dance
Himachal Pradesh	-	Nati
Haryana	-	Ras Leela, Dhamal Dance, Manjira Dance
Jammu and Kashmir	-	Rouff
Karnataka	-	Veeragase
Kerala	-	Kanniyar Kali, Chakyar Koothu, Duffmuttu, Margamkali, Oppana, Padayani, Theyyam, Thirayattam, Thitambu Nritham, Thulla
Madhya Pradesh	-	Grida Dance, Maanch, Phulpati Dance, Tertali
Maharashtra	-	Lavani, Tarpha Nach or Pavri Nach
Mizoram	-	Cheraw Dance

Nagaland	-	Chang Lo
Odisha	-	Chhau Dance, Goti Pua, Baag Nach, Dhalkhai, Dhap, Ghumra, Karma Naach, Keisabadi
Puducherry	-	Garadi
Punjab	-	Bhangra, Giddha, Malwai Giddha, Kikkli
Rajasthan	-	Ghoomar, Kalbelia, Kachchi Ghodi
Sikkim	-	Singhi Chham
Tamil Nadu	-	Karagattam or Karagam, Mayil Attam, Puli Attam, Pambu Attam, Oyilattam, Poikal Gudhirai Attam, Bommallattam, Teeru Koothu, Kolattam, Kumi, Parai Attam or Thappattam
Tripura	-	Hojagiri
Uttar Pradesh	-	Ras Leela, Mayur Nritya, Charukala
West Bengal	-	Gambhira, Alkap, Domni

2. New Delhi has many museums both national and private ones. The national ones are the following:

National Gandhi Museum

It showcases the history of the Father of our Nation - Mahatma Gandhi.

National Rail Museum

It is filled with old steam engines and other important pieces of the history of railways in the country.

National Museum

It is one of the largest museums in the world. It has exhibits from ancient times to modern times.

National Gallery of Modern Art

It has a unique and premier collection of modern art.

National Science Centre

It is a science museum created to spread awareness about science.

National Philatelic Museum

It is run by the Postal Department and showcases the history of Indian stamps.

National Handicrafts and Handloom Museum

It is run by the Ministry of Textiles and is one of the largest craft museums in the world.

National Handicraft & Design Gallery

It has a beautiful collection of handicrafts and also a rare collection of minerals and gem stones.

Chapter 8

The World's Greatest Entertainers

Page 47–48

- b. Florida
- b. Mortimer
- b. Switzerland
- b. Liverpool
- c. Michigan
- c. Kasturba Gandhi
- c. ABBA
- b. Collaborations
- b. Charlton Heston
- b. Elvis Presley

Project Work

Asha Bhosle

She is a legendary singer who has a unique voice and style. She has crossed genres and styles by collaborating with singers and musicians from all over the world. She has sung solo songs and duets in many Indian and foreign languages.

R D Burman

He was not only famous for his original compositions but was also extremely adept in taking the essence of tunes from various foreign compositions and adapting them to suit Indian music and dance sequences. He was also a singer.

Raj Kapoor

He is considered to be the greatest showman of Indian cinema. He brought in unique collaborations with cinema and art from all over the world especially Russia. He was an extremely talented actor and director. He acted and directed several movies. His children and grandchildren are also famous actors and directors.

Yash Chopra

He was an Indian film director and producer who was instrumental in increasing the mass appeal of Indian cinema all over the world. He was very successful in making blockbuster romantic films with beautiful music and songs, shot in locales all over the world especially in Europe and the UK, in times when few Indians had travelled abroad.

Unique style

There are various awards for entertainment and they are given by various organisations. Some of them are the following.

1. The Academy Awards also known as the Oscars presented by the Academy of Motion Picture Arts and Sciences
2. British Academy Film Awards awarded by the British Academy of Film and Television Arts BAFTA
3. Golden Globe Awards awarded by the Hollywood Foreign Press Association
4. National Awards awarded by the Government of India
5. Filmfare Award awarded by the magazine Filmfare

Chapter 9

Awarded with Honour

Page 52

1. b. Leela Nambudiripad
2. c. Columbia University
3. b. Jallianwala Bagh
4. b. Memphis
5. d. Denmark
6. b. Physics
7. b. Nelson Mandela
8. e. G Sankara Kurup (correct answer)
9. b. British
10. c. Shantiniketan

Nelson Mandela

Nelson Mandela was born on July 18, 1918 in Mvezo, South Africa.

He was a social activist and the first black president of South Africa. He was the driving force behind the end of apartheid in South Africa. Although he began his career in politics as a firebrand activist, he finally negotiated a settlement with F W de Klerk to end racial segregation and bring about the downfall of the apartheid system.

He was awarded the Nobel Prize for peace in 1993, along with F W de Klerk in recognition of their efforts to end apartheid.

He died on December 5, 2013. He will be remembered as one of the most significant black leaders in South Africa. He was fondly referred to as Madiba.

Gyanpeeth Award

The Jnanpith Award is annually awarded by Bharatiya Jnanpith, a literary and research organisation that is based in New Delhi. It is awarded to Indian writers, writing in twenty three Indian languages. Although it was instituted in 1961 the first award in 1965 was given to G Sankara Kurup, a Malayalam writer.

Kalidasa Puraskar

The Kalidas Samman was first awarded in 1980 by the Madhya Pradesh government. This prestigious art award is constituted in the name of Kalidas, a famous Sanskrit poet and writer of ancient India.

It is awarded for prestigious works in four categories: Classical Music, Classical Dance, Theatre and Plastic Arts.

The first recipients in 1986-87 were Semmangudi Srinivasa Iyer and Mallikarjun Mansur for Classical Music.

Sahitya Academy Award

The Sahitya Academy Award was instituted in 1954 and was first presented in 1955 to R Narayana Panikkar for his book Bhasha Sahitya Charitram. It is presented to authors for outstanding literary books in Indian languages.

It is a prestigious award.

Chapter 10

Sports

Page 57

1. b. Shihan
2. a. Mysore
3. c. Parasurama
4. c. M S Dhoni

5. c. Michigan
6. b. gentleness
7. c. Flushing Meadows
8. c. Baseball
9. c. Mohali
10. b. Greece

Project Work

World Class Cricket Stadiums in India

Name of stadium	Year it was built	State	Capacity
Eden Gardens	1865	West Bengal	60,000
Raipur International Stadium	2008	Chhattisgarh	65,000
D Y Patil Stadium Navi Mumbai	2008	Maharashtra	60,000
Jawaharlal Nehru Stadium, Kochi	1982	Kerala	60,000
MCA Pune International Cricket Centre	2011	Maharashtra	55,000
Feroz Shah Kotla Ground	1883	Delhi	55,000
Sardar Patel Stadium	1982	Gujarat	54,000
M A Chidambaram Stadium Chennai	1916	Tamil Nadu	50,000
Municipal Corporation Stadium Kozhikode	1977	Kerala	53,000
Vidarbha Cricket Association Stadium Nagpur	2008	Maharashtra	45,000
Barabati Stadium Cuttack	1958	Odisha	45,000
Roop Singh Stadium Gwalior	1978	Madhya Pradesh	45,000
Wankhede Stadium Mumbai	1974	Maharashtra	33,482

Chapter 11

In the Midst of the Ocean - Oceania

Page 64

1. b. Uluru
2. b. Bikini Atoll
3. b. Tapa
4. b. Rapa Nui
5. c. Sydney
6. b. Maoris
7. c. Tropic of Capricorn
8. e. Hans Lippershey (correct answer)
9. e. tropical (correct answer)
10. b. Land of south

Project Work

Cold War

After World War II tensions between the United States and its allies and the Soviet Union and its allies escalated.

It reached its peak between 1948 - 53. The Soviets exploded their first atomic warhead in 1949 ending the American dominance. Although there was no direct war between the two main blocks, there were wars between their allies in Cuba, Vietnam and Korea.

The 1970's saw an easing of tensions between them. In the the 1980's both the superpowers began expanding their nuclear arsenal. In the late 1980's the Cold War began to breakdown.

In late 1991 the Soviet Union broke down to form 15 independent nations including Russia, the most dominant among them. Russia elected a non communist leader democratically and the Cold War had finally come to an end.

Chapter 12

For Our Safety

Page 69

1. c. Siachen
2. b. Khukri
3. c. Black cat commandos
4. b. Mussoorie
5. c. 1962
6. b. Federal Bureau of Investigation
7. b. Garud
8. b. Aksai Chin
9. b. Lyon, France
10. c. INS Vikramaditya

Special Forces in Great Britain

There are many specialised units of the Special Forces in Britain. They are as follows:

- Special Air Service SAS
- Special Boat Service SBS
- Special Reconnaissance Regiment SRR
- Special Forces Support Group SFSG
- 18 Signals Regiment

Elite UK Forces

- Pathfinder Platoon
- Royal Marines Commandos
- RAF/ACC/ Fleet Air Arms Special Forces Flight
- Elite Artillery
- RAF Regiment

Special Forces in the United States of America

- Army Green Berets
- Army Night Stalkers
- Army Rangers
- Navy SEALs

- Navy SEALs Missions
- Marine MARSOC
- Marine RECON
- Marine RECON Missions
- Air Force Special Tactics

Special Forces in France

- Armee de Terre (Army)
- Marine Nationale (Navy)
- Armee de l'Air (Air Force)

Special Forces in Australia

Special Operation Command or SOC has the following divisions

- Special Operations Headquarters
- Special Air Service Regiment
- 1st Commando Regiment
- 2nd Commando Regiment
- Special Operations Engineer Regiment
- Special Operations Logistics Squadron

Chapter 13

Services - Defence or Civil?

Page 73

1. c. General
2. c. Field Marshall
3. c. New Delhi
4. b. Pune
5. b. Udampur
6. b. Rafale
7. e. INS Chennai (correct answer)
8. b. Beating the Retreat
9. c. Kochi
10. b. December 4

Project Work

	Indian Air Force	Indian Navy
Ranks	Marshall of the Indian Air Force	Chief of Naval Staff, Admiral
	Chief of Air Staff or Air Chief Marshall	Officers
	Officers	Enlisted Personnel
	Airmen	Naval Air Arm
	Honorary Officers	MARCOS
	Non combatants enrolled and civilians	
Training Centres	Air Force Academy, Dindigul, Hyderabad	Indian Naval Academy, coastal Kerala
	Pilot Training Establishment, Allahabad	Naval Bases along the coastline of India
	Air Force Administrative College, Coimbatore	
	School of Aviation Medicine, Bangalore	
	Air Force Technical College, Bangalore	
	Tactics and Air Combat and Defence Establishment, Gwalior	
	Paratroopers Training School, Agra	
Operating commands	Operational commands	Western Naval Command, Mumbai
	Central Air Command CAC	Eastern Naval Command, Vizag
	Southern Air Command SAC	Southern Naval Command, Kochi
	Eastern Air Command EAC	Andaman and Nicobar Command, Port Blair
	South Western Air Command SWAC,	
	Western Air Command WAC	
	Functional Commands	
	Training Command TC	
	Maintenance Command MC	
Weapons and equipment	Combat Aircrafts, AWACS,, Reconnaissance, Electronic Warfare, Tankers, Transport, Helicopters, Trainer Aircraft, Unmanned Aerial Vehicles, Surface to Air Missiles, Ballistic Missiles	Ships, Submarines, Weapons Systems, Electronic Warfare and Systems Management, Naval Satellites



Chapter 1

Prehistoric Animals

Page 6–7

- | | |
|------------------------|-------------------|
| 1. a. African | 5. b. insect |
| 2. c. Sloths | 6. a. Mermaid |
| 3. b. canines | 7. c. meat-eating |
| 4. a. Palaeontologists | 8. b. horse |

Project Work

Palaeontologists are scientists who study fossils. Besides carbon dating they also use magnetism to determine the age of fossils. Since the earth's magnetic field has changed through the passage of time, it can help to determine the age of fossils.

2. a. Yes I would like to become a palaeontologist as I like history and would like to know the ages of different fossils.
b. No, I would not like to become a palaeontologist as I am interested in art and architecture.
2. There are many mythical creatures which have animal heads and human bodies. Some of them are the following.
 1. The Unicorn is a horse with a mythical horn. It may have been inspired by the one horned Indian rhinoceros.
 2. The Mermaid has the face of a woman and the body of a fish. Manatees, seals, sea lions and dugongs may have been the inspiration.
 3. Griffins. These may have been inspired by the bones of the protoceratops.
 4. Dragons. Dinosaurs, crocodiles or giant lizards may be the inspiration.
 5. Cyclops. Fossils of dwarf elephants may have been the inspiration.
 6. Sea monsters. These may have been inspired by giant oarfish or giant squids.

7. The Roc. This mythical creature may have been inspired by the extinct aepyornis, which is supposed to be the largest bird that lived on our planet.

3. There are various theories about why dinosaurs disappeared from our planet. Some of them are the following.

- Climate change
- Disease
- Changing of flora and fauna
- Geological changes
- Asteroids from outer space

Chapter 2

Story of the Indian Farm

Page 13–14

1. a. Panchgani
2. d. Kopi Luwak
3. c. Green Revolution
4. d. Chicago Mercantile Exchange
5. c. Bagasse
6. a. Rig Veda d. Atharva Veda
7. b. Bt Cotton
8. c. Punjab
9. a. Nil Darpan (correct spelling)
10. a. Surti Kolam b. Ambemohor

Project Work

I am a farmer from a village near Thanjavur. Farmers from other parts of the rice bowl of South India and I are suffering from extreme drought conditions. I am planning to educate my children to the highest levels so they can move to cities and earn their living in a better way.

Since, there are often drought conditions in my area, I am planning to grow other crops and not just rice although they will fetch a lesser price in the market.

My family will have to sacrifice on many comforts but my income from regular crops will decrease my loans. I work very hard everyday to provide food for myself, my family and my country. When my children grow up, we may leave the farming profession as most of my countrymen have very little respect and consideration for farmers.

Chapter 3

Warm Warm Globe

Page 19–20

1. c. Netherlands
2. a. Silent Spring
3. b. Antarctica
4. d. Mumbai
5. b. USA
6. d. 12000
7. d. Larsen-B
8. a. 1.7 mm
9. b. Zooxanthellae (correct spelling)
10. c. Aral Sea

Project Work

Avoid

We live in a consumerist and materialistic world where we are bombarded with advertisements and peer pressure to have the latest gadgets, to visit the fanciest places and to eat the most exotic food available.

It is indeed good to enjoy life; however, if we don't go overboard in our material expectations and avoid indulgences we can live simpler lives and decrease our carbon footprints. We can also avoid overusing natural resources.

Reuse

It is better to use materials which can be reused i.e most often natural materials which can be used again and again instead of materials like plastics especially the use and throw kind.

Recycle

We should segregate garbage so organic matter, which is biodegradable, can be used to replenish soil or provide natural energy and inorganic matter can be recycled to form new products.

Global warming is a phenomenon of the 20th to 21st century. The opposite of global warming will be global cooling. Perhaps factors similar to those that are attributed to have caused the ice ages would cause it. Global cooling will make the world a very cold place and destroy a lot of flora and fauna.

Chapter 4

Beautiful Wonders

Page 25

1. a. Jiuzhaigou (correct spelling)
2. a. Accra
3. e. hydroelectric generator (answer unavailable in text or options)
4. b. Brahma
5. d. Lava (correct spelling)
6. c. 20 years
7. c. British Columbia
8. c. Pharos (correct spelling)
9. a. Corcovado
10. a. Jordan

Project Work

2500 years from now perhaps the planet earth will not exist considering the amount of pollution, climate change and other destructive factors that have become a part of the planet.

Robots may be the main inhabitants with few human survivors.

Cyborgs and Bionic humans may be the wonders who survive the wreckage of the planet if pollution and destruction of natural resources continue in the same manner as it currently is unless humankind become responsible for the decreasing the destruction of their planet.

Alternatively many other planets including Mars will be colonised and super structures will be built on them.

Chapter 5

Biosciences

Page 30–31

1. b. Hippocrates
2. a. Charles Darwin
3. b. Bioethics
4. a. Staphylococcus
5. b. neurons
6. b. Youyou Tu
7. d. Galapagos
8. b. Ecuador
9. d. Diphtheria
10. c. Jonas Salk

Project Work

I do not believe that Biosciences challenge spiritual beliefs. I believe that there is so much of knowledge that is unknown and so much of spiritual beliefs that are unknown, so it is difficult to say it challenges beliefs. Many famous scientists were also spiritualists and it was Newton who said that the more you know, the more you know you don't know.

Chapter 6

Art in Time of Development

Page 36–37

1. a. Banksy
2. a. Guernica
3. c. automobiles or b. camera (closest correct answers)
4. d. unconscious
5. b. 20th Century
6. a. John Constable
7. b. Baroque
8. d. Water Lilies
9. a. Francisco Goya
10. a. Greece and Rome

Project Work

Use you tube for further instructions.

Chapter 7

Dance and Music

Page 41–42

1. a. Vagator
2. b. Piya Bawari
3. c. Violinist
4. c. Amen Break (ambiguous question and closest answer)
5. a. Daddy Cool
6. c. Beatles
7. b. Samba
8. c. Cliff Richard
9. a. Que Sera Sera
10. b. Larz

Project Work

Music and dance are good for health. They relax the mind and exercise the body. When you dance, you use energy. When you sing or play a musical instrument you also use energy. Singing and dancing are a pleasant way of exercising.

Music and dance also bring discipline in life. By practising them daily, to improve in these arts, you also set schedules in your life.

Lastly music and dance are food for the soul. They make your days joyful whether you listen to music or watch dance or play an instrument or sing a song, or dance solo or in a group, whatever you do, you ultimately feel happy as that is the power of music and dance.

Chapter 8

Revolutionary Entertainment

Page 47–48

1. c. Louis Armstrong
2. d. Dramatic serials
3. b. Twitterature

4. b. Smart Kitty
5. d. China
6. a. Steve Jobs
7. c. Frank Sinatra
8. d. Amitabh Bachan
9. a. Bournvita Quiz Contest
10. b. Jim Carrey

Project Work

I would develop an app called Art Near You. It would connect a person with artists who live in the same city or are visiting that city. They can be musicians, actors, dancers, singers, painters and sculptors. Each category of art among the above will have its individual network. To join another network, the person should know someone in the category and send a friend request. Users will be able to display their art works on the network. Seminars, shows and get togethers will be organised weekly, online and in art spaces.

Chapter 9

Literature in India

Page 52–53

- | | |
|------------------------|-----------------------|
| 1. b. Sarayu | 6. c. Guptas |
| 2. a. Uttarakhand | 7. c. Vyas |
| 3. b. Tamil | 8. b. Puri |
| 4. c. Atharva | 9. b. Rudyard Kipling |
| 5. d. Munshi Premchand | 10. d. Chanakya |

Project Work

Books that were passed on by word of mouth were often told dramatically making them interesting; however, they reached a small target audience.

Written books reach a lot of readers when they are bought from a bookstore or borrowed from a library. They are a very good way to pass time as well as being entertaining and informative.

Ebooks on ereaders like Kindle, Amazon and Kobo are convenient as many books can be downloaded in the readers. They occupy less space when compared with paperbacks.

I like both written books and ebooks as each of them is convenient and different times for different reasons.

Chapter 10

Sports- Awards and Events

Page 58

1. b. Chamonix
2. c. Bharat Ratna
3. b. Dachshund
4. c. Brazil
5. d. Wenlock
6. d. Coach
7. b. Sachin Tendulkar
8. a. Gleneagles
9. b. Zurich
10. d. Olympia

Project Work

1.

	Asian Games	South Asian Games	Commonwealth Games
Origins	First games held in New Delhi, India, in 1978	First games held in Kathmandu, Nepal 1984	First held in Hamilton, Canada in 1930.
Sports Played	51 different sports since 1978	27 different sports	30 different sports
Types of medals/ awards	Gold, Silver, Bronze medals	Gold, silver, bronze medals	Gold, silver and bronze medals
Which country has won the most awards	China	India	Australia

2. In any sport discipline is a must! This is because all sports and game have rules to be followed. Without rules there would be chaos. Following rules requires discipline.

It is said "Practice makes Perfect." By practising a sport, all sportspersons improve their performance. To improve performance a daily practice schedule is necessary. To follow a schedule discipline is needed.

To be good in sports be disciplined and success will follow.

Chapter 11

United States of America and Canada

Page 64

1. c. Norway
2. d. Lent
3. a. Loonie
4. b. The Confederate States of America
5. c. Microsoft
6. a. Bald Eagle
7. b. Mandarin, Spanish, English
8. d. Wyoming
9. b. 4th of July
10. b. Union Jack

	USA	Canada
World War I	Declared war on Germany on April 6, 1917.	Canada declared war on Germany in August 1914.
World War II	Joined in after December 7, 1941 after the Japanese attacked Pearl Harbour.	Entered World War II from its start on September 10, 1939.
Cold War	Tensions with the USSR. Supported its allies in Vietnam and Korea.	Canadian forces were involved in the Korean War.

Chapter 12

International Organisations

Page 69

1. c. Brownsea
2. c. Ethiopia
3. a. English and French
4. b. March and September
5. b. 12
6. d. G-20
7. b. Paris
8. d. Sputnik 1
9. b. European Community
10. a. Vladimir Lenin

Project Work

NATO

It helped to deter and disrupt pirate attacks in the Gulf of Aden, the Horn of Africa and the Indian Ocean.

Interpol

It alerted many countries about the criminal activities happening in their country or by their citizens by issuing Special Notices. This helps in law enforcement.

International Court of Justice

It has ruled against several countries overreaching their mandates. One important judgement was the unlawful use of force by the US government against the Nicaraguan government.

Commonwealth of Independent States

From 1992 onwards they agreed to pursue policies that benefited all the countries under the CIS.

The Arab League

The Arab League initially tried to overthrow the illegal occupation of Palestine by the Israelis; however in recent years initiatives have been taken to try and resolve the conflict peacefully.

South Asian Association for Regional Cooperation
The SAARC has tried to peacefully resolve conflicts among member countries but conflicts arise between them time to time.

African Union

It has managed to resolve conflicts in Angola, Sierra Leone, Somalia, Liberia and Congo in the 1990s; however, the region is prone to many conflicts due to various economic and social factors that have remained unresolved.

Chapter 13

Government Types

Page 73–74

1. b. India
2. a. sovereign, secular, socialist, democratic republic
3. a. Windsor
4. b. Laos
5. c. Argentina
6. c. Cuba
7. d. Chancellor
8. d. A system in which experts rule
9. b. Constitutional Monarchy (closest correct answer)
10. b. Oligarchy

Project Work

I don't believe in dictatorship.

One suggested change in each of the following fields

Education

All private schools and colleges should give 50 percent of their seats as scholarships to the poor, irrespective of caste.

Healthcare

Universal healthcare for all, similar to NHS in the UK.

Military and Defense

Place concrete borders with neighbouring states to prevent infiltration but have a check post for genuine travellers.

Finance

Give a sufficient monthly stipend to marginalised, poor and disabled.

International Relations

Maintain good relations with all countries in the world and not with just those who jointly help in defence operations.



Chapter 1

Go the Dodo Way?

Page 8

- | | |
|----------------|------------------|
| 1. c. nymph | 6. b. Trivandrum |
| 2. b. Gir | 7. c. Niger |
| 3. c. Chalky | 8. a. Atlas |
| 4. b. Sumatran | 9. a. Chitwan |
| 5. a. Mahanadi | 10. b. dolphin |

Project Work

Tiger can be classified into the following species.

- Siberian Tiger
- Bengal Tiger
- South China Tiger
- Javan Tiger
- Sumatran Tiger
- Malayan Tiger
- Caspian Tiger
- Indochinese Tiger
- Bali Tiger

Tigers that have become extinct are the following.

Bali Tiger

Caspian Tiger

Javan Tiger

There are many similarities and differences between the species. Some of them are the following.

Bengal Tiger

It is the heaviest among all the species.

Indochinese Tiger

Mountains and hills are its natural habitat.

Malayan Tiger

They are found only in the Malay peninsula and the

tip of Thailand.

Siberian Tiger

It is the largest one among the sub species.

South China Tiger

It is the most ancient of the sub species. It is also the most critically endangered one.

Sumatran Tiger

It is the last surviving species of the Indonesian tigers. It has the darkest coat.

Bali Tiger

It is said that these tigers had spots in between their stripes.

Caspian Tiger

It is similar to the Siberian Tiger.

Javan Tiger

They were larger than the Bali Tiger.

Chapter 2

Tailor Made Genes

Page 15

- | | |
|--------------------|------------------------------|
| 1. c. Maize | 6. a. 1982 |
| 2. b. Golden rice | 7. b. Charles Darwin |
| 3. b. Japan | 8. b. Rapeseed |
| 4. b. lung allergy | 9. a. Bacillus thuringiensis |
| 5. b. Lecithin | 10. c. three |

Project Work

There is a lot of controversy on the safety of GM foods.

Rapeseed

GM Rapeseed was developed by Monsanto, a private MNC that sells seeds. It can emerge as a weed in other crops. It has created problems in California.

Sugar beet

GM Sugar beet has been developed by Monsanto and KWS Saat. It can emerge as a weed. It can also adversely affect cross pollination

Wheat

Although Monsanto has produced GM Wheat it hasn't as yet been commercially grown. There are safety and regulation issues.

Cotton

GM Cotton or Bt Cotton as it is called has also been developed by Monsanto. It is grown in India. It is expensive. It is not effective against all the pests that attack cotton.

Chapter 3

Our Climate in Our Hands?

Page 21

1. b. Brazil
2. b. Gandhi Sarovar
3. a. New Orleans
4. b. fourth
5. b. Aerosols
6. b. seventy billion
7. a. Rainbow Warrior
8. b. Sedimentary rocks
9. b. Phailin
10. a. Whale (closest answer to a very ambiguous question with no other correct answer in the four choices offered as whales sometimes form loops around boats or skiers or e. global conveyor belt which is a more applicable answer.

Project Work

Alternative sources of energy used in India
India is making rapid strides to meet its energy demands through renewable energy. There is a Ministry for New and Renewable Energy MNRE to encourage and support the use of renewable energy. Some of the alternative sources of energy used by India are the following.

- Solar Power
- Wind Power
- Waste to Energy
- Biofuels

Solar Power

1. Technology behind them

Solar farms, Solar Parks and Solar Power Generating Projects use photo voltaic cells and panels to generate clean and renewable solar power.

2. Where they are used

Most states in India, in the north, in the south, in the east and in the west, have large solar power generating plants. There is a solar grid. The energy generated by them is used to power state government buildings and private buildings. There is also off grid solar power being developed as rural electrification has not reached many areas as yet.

Solar water heaters, rural home lighting systems and lanterns and agricultural support in the form of water pumping systems are ways where solar energy is used. It can also be used to power refrigeration and air conditioning systems.

Some homes and factories also generate solar power using solar panels.

3. Are they easy to obtain?

Many subsidies are available to promote the use of solar power

4. Are they used by private or government companies?

Both private and government companies use solar power. Even some houses generate their own solar power and the energy produced is for personal use. Cooperative societies can undertake the building of solar power plants.

Wind Power

1. Technology behind them

Wind turbines are used to generate power in windy areas especially along the large coastline of India.

2. Where they are used
Wind farms have been set up all over India. Tamil Nadu is the largest producer of wind energy

Wind power is generated and saved to the State Grids. Sometimes surplus power is generated on windy days while no power is generated on windless days.

3. Are they easy to obtain?
Wind power is generated mainly by government agencies who set up wind farms. Some large private companies are also involved in the process of generating power from the wind.
4. Are they used by private or government?
The government is mainly involved with the production and distribution of wind power. Some large companies and factories also harness the power of the wind for their activities.

Wind power is not used at the individual or cooperative society level as yet.

Waste to energy

1. Technology behind them
Both biodegradable and non biodegradable waste can be converted to energy. The technologies used are as follows
- Thermal conversion
 - Thermo-chemical conversion
 - Bio-chemical conversion
 - Electrochemical conversion
2. Where they are used
The energy obtained is used by both the private and government sector
3. Are they easy to obtain?
Yes, it is to easy generate energy
4. Are they used by private or government companies?
Waste to energy power is used mainly by the government and municipal corporations; however some private companies also generate power.

Biofuels

1. Technology behind them
Generally 5 percent of biodiesel is blended with regular diesel and 10 percent of ethanol is blended with gasoline.
2. Where they are used
Most states in India use biofuels. Ethanol is produced in larger quantities in the sugarcane growing states in the country.
3. Are they easy to obtain?
Yes, it is easy to obtain biofuel.
4. Are they used by private or government companies?
Both private and government companies use biofuels. They can also be used as fuels for cars and trucks.

Chapter 4

Wonderfully Wondrous

Page 27

1. d. 5725
2. b. Theodore Roosevelt
3. b. desert
4. b. Woolly Mammoth
5. b. 14
6. a. Nicaragua
7. b. Sagarmatha
8. 8. There is no question or answer
9. b. Mawsynram
10. b. Isthmus

Project Work

Kilauea

It is a shield volcano situated along the southern shore of Hawaii. It is one among the five active volcanoes in the island. It has had a long and active spewing history.

When it erupts it affects the flora and fauna, though the wildlife around it has adapted to its

surroundings. From the 1840's it has been a major tourist attraction. As it is one among the few volcanoes that are almost in a constant state of eruption, with moderate activity, it remains a major tourist attraction throughout the year.

Giant's Causeway

It is a World Heritage Site situated in County Antrim, on the northern coast of Northern Ireland. It has an area of 40,000 interlocking basalt columns that were formed as a result of ancient volcanic eruption. Ancient legends speak of a ancient Irish giant or superhero with supernatural abilities named Fionn Mac Cumhaill, who was supposed to have built this causeway and hence its name.

It is a popular tourist attraction from the nineteenth century. It has a lot of unique flora and fauna. Due to millions of years of erosion and weathering, some unique shapes have been carved and the impressive ones are called Organ and Giant's Boot due to their resemblance to such shapes and structures.

Iguazu

The Iguazu Falls, the largest waterfall system in the world, is situated between Argentina and Brazil. The falls are shaped such that they resemble the alphabet J. Some areas along these large falls have names like Devil's Throat, which is U shaped, Bossetti Falls and San Marin Falls.

These falls are a major tourist attraction. They can be accessed from both Argentina and Brazil.

Hagia Sophia

It was first a Greek Orthodox Basilica, which was converted to a mosque and is now a museum. It is a beautiful example of Byzantine architecture. The interior is filled with mosaic and marble pillars. The upper gallery is shaped like a horseshoe. It has several mosaic. The dome is beautiful especially as it looks as it is hovering above, as the strategically placed windows below reflect light creating beautiful images.

There are four minarets added by the Ottomans, one of which is built using red brick while the three others are made from sandstone and white limestone.

This beautiful tourist attraction in Turkey is famous

for the different types of mosaics that can be seen in the same structure.

Karnak

The Karnak Temple Complex is in the village of El Karnak, near Luxor, Egypt. It consists of decayed temples, pylons, chapels and other partly restored buildings. The largest precinct in the Karnak Complex is devoted to Amun Re, who is considered to be the chief god of the Theban Triad. It also encloses one of the largest obelisks in the world.

This beautiful and ancient temple complex is a majority tourist attraction and is visited by thousands who wish to take a glimpse at ancient history. It can also be viewed virtually.

Angkor Wat

The Angkor Wat, a temple complex in Cambodia, is said to be the largest religious monument in the world and is spread over an area of 162.6 hectares.

It was built in the twelfth century by Suryavarman II and was completed by Jayavarman II in the Khmer (Angkor Wat) style. It was originally built as a Hindu temple, dedicated to Lord Vishnu; however, it was slowly converted to a Buddhist temple by the end of the twelfth century. It has been designed to represent Mount Meru, the abode of Hindu Gods.

It is a World Heritage Site. It is a major tourist attraction and boosts the economy of the local area, though care should be taken to maintain this historic site.

Chapter 5

Military Science

Page 33–34

- | | |
|------------------|------------------------|
| 1. c. Russia | 6. d. Italy |
| 2. a. Hypersonic | 7. b. Dronacharya |
| 3. b. Tarantis | 8. a. Hindon |
| 4. a. Wisconsin | 9. b. Kargil War |
| 5. b. Moskva | 10. b. George H W Bush |

Project Work

DRDO

The Defence Research and Development Organisation (DRDO) was formed in 1958. It has its headquarters in New Delhi and is under the Ministry of Defence, Government of India.

It has 52 laboratories all over the country. These laboratories undertake research in various fields related to defence. It is not only the largest organisation in the country but is also the one that conducts research in many diverse fields.

DRDO has developed many indigenous technologies as well as collaborated with foreign governments to boost the military and defence capabilities of India.

BrahMos Missiles

The BrahMos Missile is a two stage missile with a flight range of up to 290 km. It is the first supersonic cruise missile used in India when it was deployed on 2005 on INS Rajput as the first ship.

On February 12, 1998 Dr. A P J Abdul Kalam, a former President of India and the Missile Man of India and N V Mikhailov, the former Russian Deputy Defence Minister signed an agreement in Moscow to pave the way for the formation of BrahMos Aerospace, a joint venture between India's DRDO and Russia's NPOM.

The first successful launch of BrahMos was on June 12, 2001, following which different trials were conducted. Different versions of this missile are being developed to meet the requirements of the Indian defence forces like the army, the navy and the airforce.

Chapter 6

Art – A Different Angle

Page 40

- | | |
|------------------------|--------------------|
| 1. c. Greece | 6. b. Florence |
| 2. c. Raja Ravi Varma | 7. c. Holy Chalice |
| 3. b. Aswan | 8. c. Jatayu Vadh |
| 4. c. shadow and light | 9. b. Samuel Baker |
| 5. b. Goliath | 10. b. Van Gogh |

Project Work

Museum d'Orsay

The Musee d'Orsay is situated on the Left Bank, in Paris, France. The complex is a historic site and was a railway station before it was converted into a museum. Although it has an excellent collection of paintings, it also has some famous sculptures and collections of decorative arts and photography.

The museums has art from 1848 to 1914. It is famous for its paintings of the Impressionists and Post Impressionists and has the largest collection in the world of these paintings. It has impressive and famous works of the the famous artists including Monet, Van Gogh, Degas, Renoir, Manet, Gauguin, Sisley and Seurat.

It is one of the largest museums in Europe.

Salar Jung Museum

It is a beautiful museum that is located in Hyderabad, India. Most of its valuable collections were acquired by Nawab Mir Yousuf Ali Khan who was also called Salar Jung III.

It has a magnificent collection of arts and crafts from India, the Middle East, the Far East and Europe. One of the most popular exhibits is a marble statue called the Veiled Rebecca. It was acquired during the Nawab's visit to Rome, Italy in 1878. There are also many beautiful knives, miniature paintings, clocks, furniture and manuscripts.

It has been declared as a museum of national importance by the Indian Parliament.

Cairo Museum

It is also called the Museum of Egyptian Antiquities or Egyptian Museum and was first opened in 1902, though the original collections were first placed in another museum building in 1835. Situated in Cairo, Egypt, it has a humongous collection of 120,000 antique Egyptian objects, some of which are displayed and others are in the storerooms.

It has the largest collection of Pharaonic antiquities. It is a treasure house of sculptures made of stone and wood that are well preserved. Many treasures from the tomb of Tutankhamen are displayed in

the museum. There are also ancient letters carved in stone.

The museum has seen its fair share of upheavals and has once again been opened to the public from July 2017.

Rijksmuseum

It is a Dutch National Museum located in Museum Square, Amsterdam. It has a huge collection of objects showcasing the arts and history of the Dutch. It was first located in the Hague in 1800, then it moved to the Royal Palace in Amsterdam in 1808 and has been in its current architectural structure from 1885.

Although it has a collection of 1 million objects, from the Middle Ages to date, 8000 objects of art and history are displayed. It has art objects from the 18th, 19th, 20th and 21st century. It has famous paintings by Dutch artists including The Night Watch by Rembrandt and The Milkmaid by Vermeer.

It also has a small Asian Gallery. It is one of the most visited museums in Europe.

British Museum

The British Museum is located in Bloomsbury, London, England. It was established in 1753, housing the private collections of Sir Hans Sloane. On January 15, 1759, its collections housed in Montague House, were opened to the public. In the centuries that followed the museum expanded and is now one of the biggest and most renowned museums in the world.

It has objects from the Stone Ages to modern times and showcases arts, sculptures, artefacts and paintings. Some of its most famous exhibits are controversial as they were taken from countries which Britain ruled over or defeated in wars. Some of them include the Elgin marbles (Greece), the Benin Bronzes (Nigeria) and the Rosetta Stone (Egypt).

Entrance to the museum is free, except for special exhibits. It is always filled with tourists and is sometimes called a museum of the world for the world.

Chapter 7

The Art Industry and Online Art

Page 46

1. b. Holkar
2. c. Chanderi (closest correct answer)
3. b. Lapis lazuli
4. c. London
5. c. New York, Bilbao, Venice
6. c. Walnut
7. b. France
8. a. Saffronart (closest correct answer)
d. Artflute also a correct option
9. d. Maharashtra
10. c. Raghurajpur

Project Work

Cottage Industries around the world

Iceland

1. Wool products including hats and gloves are made here.
2. Small and cosy craft shops sell musical baskets, porcelain sculptures, jewellery, glassworks and paintings.

Ghana

Scrap aluminium is converted to many household items like spoons, cooking pots and teapots using sand cast moulding techniques. This is an ancient craft that has been apart of the cottage, rural and urban economy through the years and is of social and cultural importance to Ghana. The cast aluminium pot industry of Ghana not only keeps traditions alive but also provides a livelihood.

Vietnam

Traditional craft villages, some of which have a 100 year history, are called lang nghe. They process local foods and make traditional handicrafts and household goods. Some of these include objects and furniture made from ceramics, textiles, paper and wood.

Fiji

The cottage industry in Fiji is renowned for its high quality furniture. It also produces wooden arts and crafts that are made using the waste wood that remains from logging.

Chile

Chile has a long history specific to different parts of the country which are famous for its traditional arts and crafts. Some of them are the following.

- Basketry
- Carving and woodwork
- Ceramics
- Cowboy equipment and clothing
- Knitwear and textiles
- Silverware
- Specialist crafts

Chapter 8

People Who Make Entertainment Beautiful!

Page 51

1. b. London
2. b. Charlie Bucket
3. b. Illinois
4. b. Star Wars
5. b. Ben Kingsley
6. d. Homai Vyarwalla
7. d. Adam and Jacob Worton
8. a. Glenfinnan
9. b. Susie Figgis
10. b. Kasauli

Project Work

Satyajit Ray

He was born in Calcutta on May 2, 1921. He made several movies in Bengali. His humanistic approach made his movies not only transcend language barriers but also made them appealing to wide and diverse audiences.

His movies reflected all aspects of human lives: relationships, conflicts, joys, sorrows and struggles. His first film Pather Panchali in 1955 set up a benchmark that was followed or surpassed by his other films.

He has received many international and natural awards including the Lifetime Achievement Award from the Academy Awards (Oscars), the Legion d'Honneur and the Bharat Ratna, the highest Indian award.

He passed away on April 23, 1992.

Mrinal Sen

He was born on May 14, 1923, in Faridpur, which is now part of Bangladesh.

He made his first feature film in 1953 but it was his third feature film Baishey Shraavan which gained him recognition and international exposure. He began the New Cinema movement in India.

He received awards from almost all the major film festivals in the world. He also received the Dadasaheb Phalke Award from India.

K Balachander

He was born on July 9, 1930 in the Madras Presidency. He was famous for his mastery over unconventional themes and his hard hitting subject matter as he was always willing to write and direct subjects which his peers were afraid to explore.

He began his career in films as a screen writer and graduated to become a famous director. He was the one who first introduced many film personalities like Nagesh, Sujata, Kamal Haasan, Rajinikanth, Chiranjeevi, Jayaprada and many more. Although he directed mainly Tamil films, he also directed a few Telugu, Kannada and Hindi films. In the latter half of his career he produced popular TV serials.

He has won 9 National Film Awards, 13 Filmfare Awards, the Padma Sri, the Dadasaheb Phalke Award and many others. He passed away on December 23, 2014.

Alfred Hitchcock

He was born in England on August 13, 1899. He began his career as a card designer at the age of 20, moving on to become screenwriter, art director, assistant director and director.

He is called the Master of Suspense. He directed numerous British and American films which were big box office hits. His most recognised films are Psycho, Rebecca, North by Northwest and Strangers On A Train. He appeared briefly, as an actor, in most of his films

He received many awards including golden globes and BAFTA awards and has two stars on Hollywood Walk of Fame: one for his contribution to motion pictures and the other for his contribution to television. He passed away on April 29, 1980.

Steven Spielberg

He was born on December 18, 1946 in Cincinnati, Ohio. He began his career directing sci-fi and adventure movies and moved on to direct humanistic issues. He has worked for television, for films and for video games as he is an avid creator of some famous games.

Some of his popular films are Jaws, E.T. Close Encounters of the Third Kind, Raiders of the Lost Ark, The Color Purple, Schindler's List, Saving Private Ryan and Jurassic Park.

He has won three Academy Awards, AFI Lifetime Achievement Award in 1995 and many other awards.

George Lucas

He was born in Modesto, California on May 14, 1944. He is best known as the creator of Star Wars and Indiana Jones.

Star Wars, in 1977, became the highest grossing film of its time and collected three Academy Awards. In 1991 he founded the George Lucas Education Foundation an NGO.

He has received many awards including the AFI Lifetime Achievement Award.

Chapter 9

Literature – A World of its Own

Page 56–57

- | | |
|----------------------|-----------------------------|
| 1. b. Smriti | 6. b. Merchant of Venice |
| 2. a. Namita Gokhale | 7. d. Dete |
| 3. d. Oxford | 8. a. Alexander Dumas |
| 4. b. Grendel | 9. b. Clover |
| 5. b. 1984 | 10. c. Anne of Green Gables |

Project Work

Enact scenes from any of Shakespeare's plays.

Chapter 10

Sports – Another Angle

Page 62

- | | |
|-------------------|---------------------|
| 1. a. American | 6. c. VVS Laxman |
| 2. b. Anant Joshi | 7. c. steroids |
| 3. c. Mawashi | 8. b. South African |
| 4. c. Warriors | 9. b. Kerala |
| 5. c. hamstring | 10. b. Chanko Nabe |

Project Work

A PowerPoint presentation is made by the students.

Chapter 11

India – A Nation in the Making

Page 67–68

- | | |
|---------------------------|--------------------|
| 1. c. Apsara | 6. b. 1969 |
| 2. b. Taiwan | 7. b. El Nino |
| 3. d. 22 | 8. b. Bangalore |
| 4. c. Arunachal Pradesh | 9. c. Rafale |
| 5. c. uranium and thorium | 10. b. Aadhar card |

Project Work

UNESCO

The constitution of the UNESCO was signed on November 16, 1945 and came into force on November 4, 1946. It has 195 members and 8 associate members. Its headquarters are in Paris, France.

It is responsible for fostering international cooperation in the following fields.

- Education
- Science
- Culture
- Communication

Its motto is "Building peace in the minds of men and women."

UNICEF

The United Nations Children's Fund has been working from 70 years, defending children's rights in 190 countries and territories.

Some of the programmes they create for children are the following.

- Child protection and inclusion
- Child survival
- Education
- UNICEF in emergencies
- Gender
- Innovations for children
- Supply and logistics
- Research and analysis

WFP

The World Food Programme works in over 80 countries to improve food security and nutrition. Although there was earlier assistance to countries in need the WFP became a full fledged organisation of the UN in 1965. The priority of this programme is 'Zero Hunger.'

Their vision of Zero Hunger has five steps.

- Put the furthest behind first
- Pave the road from farm to market
- Reduce food waste
- Encourage a sustainable variety of crops
- Make nutrition a priority, starting with a child's first 1000 days

UNDP

United Nations Development Programme works in nearly 170 countries and territories.

The three main areas of focus are as follows.

- Sustainable development
- Democratic governance and peace building
- Climate and disaster resilience

UNFPA

The United Nations Population Fund motto is "Delivering a world where every pregnancy is wanted, every childbirth is safe and every young person's potential is fulfilled."

It supports the following.

- Reproductive health care for women and youth
- Health of pregnant women
- Reliable access to modern contraceptives
- Training of health workers to support supervised childbirths
- Prevent gender based violence
- Abandonment of female genital mutilation
- Prevention of teen pregnancies
- Efforts to end child marriages
- Delivery of safe birth supplies in areas of conflicts and disasters
- Censuses, data collection and analyses

UNEP

United Nations Environmental Programme has its headquarters in Nairobi, Kenya. It focuses on the following.

- Climate change
- Disasters and conflicts
- Ecosystem Management
- Environmental Governance
- Chemicals & Waste
- Resource Efficiency
- Environment under review

UNHCR

The United Nations High Commission for Refugees was created in 1950, after World War II. It works with governments all over the world to focus on the following.

- Advocacy
- Cash based interventions
- Education
- Environment, Disasters and Climate Change

- Livelihoods
- Public Health
- Shelter
- Asylum and Migration
- Coordinating Assistance
- Ending Statelessness
- Innovation
- Protection
- Safeguarding Individuals
- Solutions

Chapter 12

Organisations with a Purpose

Page 73–74

- | | |
|-----------------|-----------------------------|
| 1. b. Palmyra | 6. b. Franklin D -Roosevelt |
| 2. b. Bihar | |
| 3. b. Lake Chad | 7. d. Switzerland |
| 4. c. China | 8. b. Vatican |
| 5. b. Nigeria | 9. c. Kofi Annan |
| | 10. c. Tuvalu |

Project Work

Nuclear Reactors

A nuclear reactor is a device that controls a sustained nuclear reaction. It is used to generate electricity and to propel ships.

How does a reactor work?

Control rods are inserted or withdrawn, to varying degrees to slow down or to accelerate the reaction. In the reactor water separates the fuel tubes. This water is turned to steam by the heat produced by fission. This steam is used to drive a turbine, which spins a generator that creates electricity.

What is the material used?

A boiling water nuclear reactor uses U 235, enriched as uranium dioxide as fuel.

Are the reactions controllable/uncontrollable?

Yes

How is safety managed?

Safety is taken very seriously and is controlled through the following ways

- Control of radio activity
- Maintenance of core cooling
- Maintenance of barriers that release radiation

Nuclear disasters which have affected the world

The world's worst nuclear disasters are as follows

1. Fukushima, Japan March 2011
2. Chernobyl April 26, 1986
3. Three Mile Island, Pennsylvania, USA March 28, 1978
4. Enrico Fermi Unit 1 Michigan, USA October 5, 1966
5. SL -1 Idaho, USA January 3, 1961
6. Sodium Reactor Experiment, California, USA July 1959
7. Windscale, Cumbria, UK October 10, 1957

Chapter 13

Politics of Different Ages

Page 79

1. a. Rig
2. c. Thanesar
3. c. Puducherry
4. d. Chandra Gupta 1
5. a. Gwalior (b, c, d can also be correct)
6. b. Italian
7. e. Pali (correct option unavailable in text)
8. b. Megasthenes
9. b. Hunas
10. b. Kosala

Project Work

1. Why was the rule of the Guptas called the Golden Period?

The rule of the Guptas in India increased the prosperity of the country. There was a lot of progress in inventions and discoveries in the following areas.

- Science
- Technology
- Engineering
- Arts
- Literature
- Astronomy
- Mathematics
- Logic
- Philosophy
- Religion

That is why the rule of the Guptas is called the Golden Period.

2. Each union territory in India was formed because it was too small to become a state or too unique to be merged with a state or too far from the mainland of any state for example Andaman and Nicobar Islands. So they are ruled by the Union Government.

The 7 Union Territories in India are the following.

1. Andaman and Nicobar Islands
2. Chandigarh
3. Dadra and Nagar Haveli
4. Daman and Diu
5. Lakshadweep
6. Delhi
7. Puducherry