

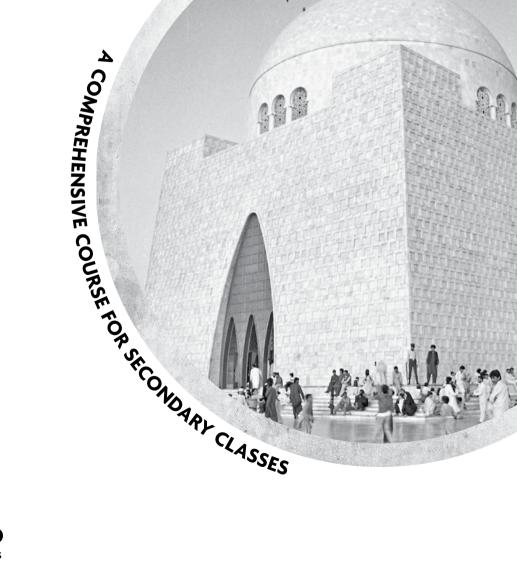
Social Studies for Pakistan

8

# Know Your World

# **Teaching Guide**

KHADIJA CHAGLA-BAIG





# History

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#### HISTORY

**CHAPTER 1** 

# The Decline of the Mughals

#### **Discussion points**

All civilizations and empires ultimately end or merge into others. The Mughal Empire was no different. There were many reasons that led to its weakening and the final takeover by the British. However, it was not an overnight process. Signs of weakening began by the end of the 17<sup>th</sup> century. Many states broke away from the empire and became independent. Intrigues and rebellions by previously suppressed groups surged beyond control. Inconsistent policies and religious intolerance created unrest among the masses and worsened the situation. A string of incompetent and selfish rulers created instability and lack of confidence in the Mughal rulers. The empire completely collapsed in 1858.

#### **ANSWER KEY**

**Content review** 

- A 1. Bahadur Shah
- A 2. Muhammad Shah—29 years
- A 3. The British
- A 4. Rebellions and power tussles, incompetent rulers, Nadir Shah's invasion, arrival of the British and their schemes to spread their rule limited his rule to Delhi, later stripped him of his powers as an emperor, deposed and exiled him to Burma, deprived him of a state burial. Believed him to be the perpetrator behind the Mutiny

**Going further** 

The couplet used as reference in lesson plan three can be used as a clue to help answer this question.

Challenge!

Five

Lesson Plans

Number of lessons: 4

**Duration:** 40 minutes

**Resources:** textbook



#### Lesson 1—Looking back at the later Mughals

#### **Teaching Objective:**

• To inform students about the later Mughals

#### Learning Outcome:

• Students must be able to understand the role of later Mughals in the downfall of the empire.

#### Introduction (10 minutes):

Ask students what they remember from the last book. For the benefit of those who have not read Book 7, give a brief recap of the Mughals from Babar to Aurangzaib. Use students as prompters, encourage them to take down short notes and points. Discuss vocabulary words.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Talk about how the Mughal Empire ran into trouble at the hands of not only rivals and rebels but also because of the incompetence of their own rulers. As a result, they were either killed or became puppets in the hands of their enemies and opportunists. This gave a chance to Sikhs, Marathas, Rajputs, and others to seize the day and weaken the empire. Study the table showing Aurangzaib's successors and the list of problems faced by them. Ask students what 'virtual kingmakers' means. Explain the role of the Sayyid brothers as kingmakers and their contribution in reducing the importance and authority of Mughal kings.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any.

#### Class work: None

Homework: Questions 1 to 4 of Content review

#### Lesson 2—Major events in the Mughal Empire after Aurangzaib's death

#### **Teaching Objectives:**

- To familiarize students with the problems later Mughal rulers had to face
- To describe the major tide-turning events in the Mughal Empire during the 18<sup>th</sup> century
- To explain the downfall of the Mughal Empire

#### Learning Outcome:

• Students must be able to describe the events that led to the weakening and fall of the empire.

#### Introduction (10 minutes):

Recap previous lesson. Ask students questions from the previous lesson. Write down key points on the board. Link them to the series of events in the timeline as an introduction.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Go over each event and year point by point. Talk about the cause and effect of each event, and its overall impact on the

Mughal Empire. Ask students to analyse and describe the impact each event must have had on the people and on the functioning and the image of the empire.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any.

**Homework:** Give students the following couplet and ask them to (a) find the name of the poet, (b) bring the remaining couplets of the poem.

Na kisi ki aankh ka nur hoon, na kisi ke dil ka qarar hoon Jo kisi ke kaam na aa sakay, main woh aik musht-e-ghubar hoon

#### Lesson 3—The last Mughal Emperor and the end of the Mughal rule

#### **Teaching Objectives:**

- To introduce Bahadur Shah Zafar as the last Mughal emperor and describe his plight
- To provide a background for the British rule in India

#### Learning Outcomes:

Students should be able to:

- describe the strengths and weaknesses of Bahadur Shah Zafar
- explain the reasons for the consolidation of British rule in India

#### Introduction and explanation (10 minutes):

Ask students about the name of the poet and discuss the poem that was given for homework in the previous lesson. Talk about the helplessness and suffering that the poet talks about. Can they imagine a king of the Mughal Empire reduced to such a plight? Tell them that the poet is Sirajuddin Bahadur Shah Zafar himself—the last Mughal emperor. Discuss the events during his time and the consolidation of British rule.

#### Conclusion (5 minutes):

Preparatory talk for the next lesson: tell students that they will be studying the roles of Marathas and the Sikhs who helped the British to establish themselves on the 'Throne of Delhi.'

Instructions (5 minutes): Explain the questions to students. Address any queries.

**Class work** (20 minutes): Write down answers to questions given in *Content review*.

#### Lesson 4—Written work

#### **Teaching Objective:**

• To reinforce the knowledge of events leading to the end of the Mughal Empire, through written work

#### Learning Outcome:

• Students should be able to answer correctly.

**Instructions (5 minutes):** Explain the format of the worksheet to students. Address any queries.

Class work: 35 minutes

#### WORKSHEET

Date	:	Name:
Q 1. Choose the correct answer.		
	a.	Which of the following emperors gave permission to the British to trade with India?
		(Akbar, Shahjahan, Jahangir)
	b.	The first twenty years of Aurangzaib were (fruitful, frightening, peaceful)
	C.	The Sayyid Brothers were influential (ministers, generals, advisors) of the army. (Mughal, British, Maratha)
	d.	Bahadur Shah Zafar was accused of being the (peacemaker, instigator, negotiator) in the War of Independence of 1857.
Q 2.	Whi	ch phrase from the text indicates the power of the Sayyid brothers?
Q 3.	Wha	at were Bahadur Shah's interests?
Q 4.	Why	y do you think he was called a passive king?
Q 5.	Who Emp	o are the following people and what role did they play in the fall of the Mughal bire?

a. Banda Bahadur

b. Ahmad Shah Abdali

c. Mohammad Shah

#### HISTORY

# The Marathas and the Sikhs

#### **Discussion points**

**CHAPTER 2** 

The Marathas and the Sikhs need to be studied in detail as they played an instrumental role in the downfall of the Mughals. The subcontinent has always been home to many religions at the same time. Hinduism, Islam, and Sikkhism are the major faiths in this region. Rulers like Akbar did not only show religious tolerance but also went out of their way to favour other religions in order to maintain peace and promote harmony in the region. On the contrary, Aurangzaib dealt with non-Muslims very strictly. In addition, troublemakers like the Maratha leaders of the Bhosle dynasty continuously created problems because they believed themselves to be the true people of the land. They considered the Mughals to be outsiders and invaders. However, even the Hindus feared the Marathas just like the Muslims did.

On the other hand, Sikkhism, a comparatively new religion, began and strengthened during the sixteenth and seventeenth centuries. Founded by Guru Nanak, Sikkhism is described to be a fusion of tenets from Islam, Hinduism, and Buddhism. Sikhs created trouble for the Mughals when they rallied for Jahangir's son Khusro Mirza against him. In order to quell the insurgency, Jahangir killed their leader Guru Arjun Singh. The Sikhs swore revenge and did not let the Mughal emperors live in peace until the empire was finally defeated by the British.

#### **ANSWER KEY**

**Content review** 

- A 1. South of India
- A 2. Ahmad Shah Abdali's war against them, civil wars, death of Nana Farnavis
- A 3. Akbar
- A 4. Amritsar

#### **Going further**

- a. brave, ruthless, hostile, clever warriors who could go to any lengths to win battles and wars
  - (i) helped them win, conquer land, establish rule, create fear in people
  - (ii) they became overconfident and resorted to unnecessary killing and looting; this enraged other stronger rulers who finally crushed their strength.
- b. Open-ended question

#### Challenge!

Option 1: A powerful kingdom or empire



**Lesson Plans** 

Number of lessons: 3

Duration: 40 minutes

**Resources:** textbook

#### Lesson 1—The Marathas

#### **Teaching Objectives:**

- To describe the uprisings against the Mughals
- To describe the Marathas' role in the downfall of the empire
- To identify the reasons that led to the Marathas downfall

#### Learning Outcomes:

Students must be able to:

- describe Maratha sentiments and temperament
- identify the reasons that led to the rise and fall of the Marathas
- explain the role of Marathas in the fall of the Mughals

#### Introduction (10 minutes):

Ask students what they remember about the Bhonsles from the previous years—Shahji, Shivaji, and Shambhaji. Talk about the anti-Mughal sentiments that they transferred from generation to generation because they considered the Mughal to be usurpers of their homeland. Tell students that regardless of the validity of this claim, Hindus, Muslims, and the British have unequivocally condemned their ruthlessness and senseless killings. Discuss vocabulary words.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Discuss the map on page 7. The Marathas were finally crushed after their war with Ahmad Shah Abdali, but by then they had already done irreparable damage to the Mughal Empire. The Marathas were not only brutal towards the Muslims but even to people of their own religion and clans. This is why they were feared by Muslims and Hindus alike. Many kings and princes tried to make peace with them and gave in to their demands hoping that they would end their hostility, but in each instance, the Marathas deceived and cheated them and created problems for them.

**Conclusion (5 minutes):** Recap the lesson highlighting the main ideas. Answer student queries, if any.

#### Class work: None

Homework: Going further (a) and (b)

#### Lesson 2—The Sikhs

#### **Teaching Objective:**

• To introduce the Sikh religion and its contribution to the downfall of the Mughal Empire

#### Learning Outcomes:

Students must be able to:

- discuss the origins of Sikkhism
- describe the attitude of different Mughal emperors towards the Sikhs
- analyse the role of Sikh rebellions in destabilizing the Mughal Empire
- describe the consolidation of Sikh rule in India

#### Introduction and vocabulary (10 minutes):

Recap the previous lesson as well as the important points from chapter 1. Talk about Banda Bahadur and his brigade. Ask students if they have heard of a place called Hasan Abdal and its claim to fame—the famous Cadet College and Nankana Saahib, a Sikh religious site. Speak about how Sikh pilgrims from all over the world come to Pakistan every year and how the religious authorities and locals help them. The pilgrims return happy and satisfied with the hospitality and arrangements. Discuss how beneficial it is for a country to be tolerant. Link the conversation back to the treatment of Sikhs by the Mughals.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Use the atlas to locate Amritsar in India and Hassan Abdal near Islamabad in Pakistan. Compare with the map on page 7. Discuss and explain the sequence of events that led to hostility between the Mughals and the Sikhs in Jahangir and Aurangzaib's times.

**Conclusion (5 minutes):** Recap the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Content review questions 3 and 4, Going further (b)

#### **Project/Activity:**

Research: The Anglo-Sikh War

Guidelines: What does the name mean, when was it fought, what were the reasons, who were the parties, what were the outcomes, any other interesting fact.

Students can use any format to share their research: essay, poster, illustrations, speech, powerpoint presentation, etc. Assess them on the accuracy of content and creativity and clarity in presenting information.

#### Lesson 3—Worksheet/Assessment sheet

#### **Teaching Objective:**

• To reinforce the role of Maratha and Sikh uprisings and rebellions through written work

#### Learning Outcome:

• Students should be able to answer correctly.

**Instructions (5 minutes):** Explain the format of the worksheet to students. Address any queries.

Class work: 35 minutes

#### WORKSHEET

Date:	Name:

- 1. Choose the correct answer:
  - a. The Marathas first surfaced during the reign of Emperor (Akbar, Jahangir, Shahjahan).
  - b. Shivaji was (Shambhaji, Shahji, Nana Farnavis) Bhosle's son.
  - c. The Marathas were defeated at the Battle of (Panipat, Mysore, Patna) by (Bahadur Shah II, Nadir Shah, Ahmad Shah Abdali).
  - d. Maratha rule came to an end in (1600, 1800, 1900).
  - e. The earliest centre for Sikkhism was (Lahore, Amritsar, Delhi).
  - f. Sikhs supported (Khusro Mirza, Nana Farnavis, Guru Gobind Singh) against Jahangir.
  - g. The Sikhs launched a revenge campaign against the Mughals under the leadership of (Banda Bahadur, Guru Arjun Singh, Guru Gobind).
- 2. What do the following mean:
  - a. Guru
  - b. Imperial power

- c. Revenge campaign
- d. Ruled like birds of prey

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- 3. Answer the following questions.
  - a. Describe Maratha mindset and nature.

b. What clue from the text suggests that the Mughals wanted to be at peace with the Marathas?

c. What led to the weakening of the Marathas and their downfall?

d. Why were the Marathas unpopular?

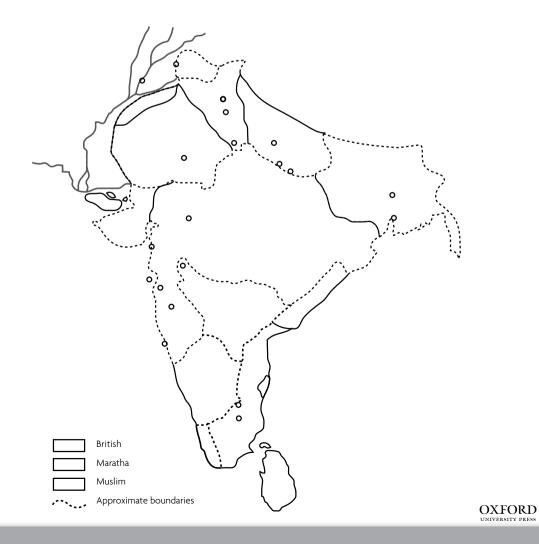
e. Discuss the teachings of Sikkhism.

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f. Why did the Mughals and the Sikhs have a 'falling out' after Akbar's rule?

g. Who was Maharaja Ranjit Singh? Why is he considered an important figure for the Sikhs?

4. On the map below, label and shade in Maratha and Sikh strongholds.



#### HISTORY

#### CHAPTER 3

# European Colonization of the Subcontinent

#### **Discussion points**

India's colonization by the west can be dated back to Alexander's conquest of the Punjab upto the Swat and Bajaur valleys in the north of Pakistan. He nearly fulfilled his father's dream of conquering the western part of the world or 'India' and be known as the king of the world. Alexander's attempts to Hellenize the world brought many elements of Greek culture to India. Spice trade between the Roman Empire and India established stable ties between the people. However, the Romans did not express continued interest in conquering and establishing their rule in Indian territories. Still, art and culture flourished because of this trading relationship.

The age of exploration and discovery which began around the 15<sup>th</sup> century, brought many Europeans to the subcontinent in search of profitable trade ties. The Turkish Ottoman Empire controlled all the traditional trade routes by land and levied taxes at all major stops. The Ottoman Empire also had political differences with the mainly Catholic Christian European countries. The Europeans sought to avoid the traditional routes because of these problems and started concentrated efforts to discover a naval route to India. Portuguese were the first to arrive in the 15<sup>th</sup> century, followed by the Netherlands, England, and finally France in the 16<sup>th</sup> and 17<sup>th</sup> centuries. With this came the struggle for power and control. Trade rivalries surged, and each country was determined to drive out the others. The riches of India were the most coveted.

The 17<sup>th</sup> century brought about many changes in rapid succession. The Portuguese were driven out by the British. The Dutch increased their interest in the East Indies (present day Indonesia). The British and the French were left in the arena as the key players.

#### **ANSWER KEY**

**Content review** 

- A 1. The Portuguese
- A 2. European explorers arrived by the naval route.
- A 3. They wanted to establish their control over new trade routes to India because all other routes were under the control of the Ottoman Empire.
- A 4. Trade between Europe and India, especially for spices
- A 5. Pondicherry, Yanam, and Karikal on the Coromandel coast on the east, Mahe on the Malabar Coast on the west, Chanderanagor in Bengal, and Seychelles and Mauritius islands in the Indian Ocean

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#### **Going further**

- a. Open-ended question—see what answers students come up with on their own. Prompt them to think of colonization and expansion of rule.
- b. Question can be given for research. Suggestions are: grains, cloth, animal fur, tobacco, ivory, sugar, tea, coffee, precious and semi-precious stones, metals, wood, and spices. Encourage students to list them in the order of importance, from the least to the most valuable commodity according to their perceptions.
- c. Trade by land included too many stops and different governments charged taxes at every major checkpost. Traditional trade routes over land included crossing seas, so the cost and labour of unloading and reloading goods was also cumbersome. Caravans and merchants travelling on land were also at risk of being robbed. Trade by sea took a long time as compared to trade by land, but saved the amount to be paid in taxes, avoided the problem of unloading cargo at several stops, and was generally safe from robberies.

#### Challenge!

Option 2: medicinal herbs

#### Lesson Plans

#### Number of lessons: 3

Duration: 40 minutes

**Resources:** textbook and atlas

#### Lesson 1—Trade routes

#### **Teaching Objectives:**

- To describe the three major trade routes from Europe to India
- To explain how and why the Portuguese circumvented these routes and reached India

#### Learning Outcome:

• Students must be able to describe the geographical importance of these routes and the reasons for Europeans' efforts to reach India

#### Introduction (10 minutes):

Recap the previous two chapters with emphasis on the first chapter, and introduce the main idea of this chapter—the arrival of foreign powers in India. Remind students about Alexander. Remind them how India was famous for its riches and how the west wanted to control the relatively unknown and unexplored East. In the centre was Turkey, part of east and part of west, and a flourishing Muslim Empire in those days. The Christian powers of Europe were unhappy and wanted to seek control, and decided to explore possible alternate avenues.

#### Explanation (25 minutes):

Read from the text and parallel explanation. Use the map in the textbook and compare it with the map in the atlas. Compare the new and old names of places. Trace routes, explain the location of Turkey, and describe how the Portuguese circumvented the traditional routes in order to reach India. Spices were the most profitable commodity in those days and India produced a vast range of spices. This is why trade with this region appeared lucrative to the Europeans.

**Conclusion (5 minutes):** Recap the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Content review questions 1-3

#### Lesson 2—The Arrivals—the Portuguese, Dutch, French, and British

#### Teaching Objective:

• To explain the scene of arrival of the Europeans—who they were, why they came, their route, their rivalries, and their strategies to gain dominance

#### Learning Outcomes:

Students must be able to:

- name the early Europeans who entered the subcontinent
- identify the reasons for the arrival of Europeans
- describe their rivalries and strategies for gaining control

#### Introduction (10 minutes):

Discuss the phrase 'economic and political reasons' and explain what they mean. Make a list of some economic and political reasons and talk about how they matter and that all nations have to safeguard their political and economic situations in order to survive and become strong.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Use the map to show the east and west coasts of India and identify the colonies. Ask students about some important import and export commodities of our times, and compare them with spices and other trade commodities of the time. Discuss how desperate the Europeans were to enter this region and how they worked out different routes to reach India. You can tell them about Christopher Columbus who set out on a similar expedition to discover a route to India. Navigators and thinkers had recently been able to convince the people that the world was round and not flat. Therefore, Christopher Columbus, commissioned by the Spanish government, decided to travel towards the west to find a route to India based on this scientific fact. Columbus was not wrong in his assumption but he had no idea that a huge landmass of North and South America would be in the way. Ask them which explorer reached India first and which country he belonged to. Tell them Vasco da Gama reached India first by discovering a route around the tip of the continent of Africa, and paved the way to establish Portuguese hold over territories in India. Consult the map in the textbook which shows the route taken by Vasco da Gama. Also point out the traditional trade routes shown in the map.

**Conclusion (5 minutes):** Recap the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Going further exercises (a) and (b)

#### **Project/Activity:**

#### Monopoly:

Group students and ask students to make their own version of Monopoly or any similar game that can reinforce the concept of trade. They can research for additional information or teacher can provide some extra bits of information. Have a game period and play with each group to see what they come up with. They can also have trading goods just like there are areas, depending on the value. Grade them on the sensible use of resources, creativity, correctness of content, teamwork.

#### Lesson 3—Worksheet/Assessment sheet

#### **Teaching Objective:**

• To reinforce knowledge about arrival of the Europeans through written work

#### Learning Outcome:

• Students should be able to answer correctly.

**Instructions (5 minutes):** Explain the format of the worksheet to students. Address any queries.

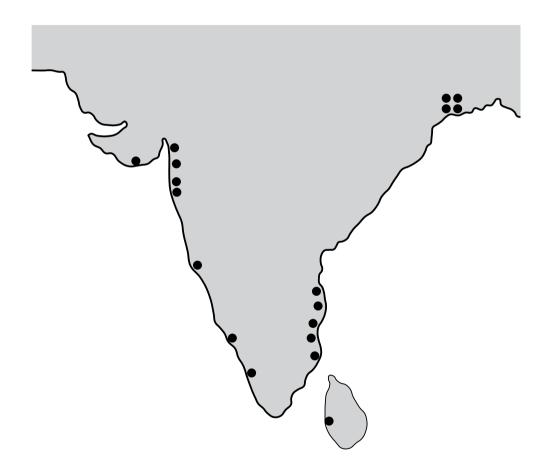
Class work: 35 minutes

#### WORKSHEET

Name: \_\_\_\_ Date: \_\_\_\_ Q 1. Choose the correct answer. a) The \_\_\_\_\_ route passed through Syria. (middle, northern, southern) Vasco da Gama and Columbus were \_\_\_\_\_. (adventurers, explorers, warriors) b) The word commerce means \_\_\_\_\_\_. (fishing, trade, engineering) c) Portuguese headquarters was in \_\_\_\_\_. (Pondicherry, Kerala, Goa) d) The new name for East Indies is \_\_\_\_\_. (Indonesia, Hindustan, United States e) of America) Q 2. Answer the following questions. Describe the three trade routes that supported trade between the East and the West. a) For how many years did the Ottoman Empire stay in power? b) Why does Aini dress up as a member of the crew? c)

d) Who is Hippalus and what are his contributions to the science of navigation?

- e) Explain the background for the phrase 'for economic and political reasons, it had become a necessity for the Christians to find alternate trade routes to India.'
- Q 3. Label the following places on the map given below: Chanderanagore, Yanam, Pondicherry, Karikal, Mahe, Malabar Coast, East Indies, and Coromandel Coast. Make a key or legend to show French and Dutch colonies.



### CHAPTER 4 The British East India Company

#### **Discussion points**

**HISTORY** 

When Queen Elizabeth I gave the British permission to trade with India, some British merchants joined hands and formed the East India Company. After many failed negotiations, they finally found a foothold in the subcontinent. It was mainly through the efforts of Sir Thomas Roe, whose skilled diplomacy won over Emperor Jahangir's heart and he allowed the British to establish trading ties with India. Little did Jahangir know that he was presenting the Mughal Empire to the British. The British wasted no time and opportunity to establish themselves in India. They purchased land, built factories and other buildings. They also started to change the social, economic, and physical layout of the empire.

#### **ANSWER KEY**

**Content review** 

- A 1. Because they wanted exclusive control over India
- A 2. Heirs of the Nawab of Carnatic
- A 3. It led to the weakening/decline of French power in India
- A 4. The governor of Bengal
- A 5. They bought land from local landowners; they fortified their establishments for their security; built factories, warehouses, offices, and ports; developed towns and encouraged artisans and skilled labourers to settle around these strongholds.

#### **Going further**

- i. Robert Clive: Driving the French out would have been difficult or maybe even impossible.
- ii. Mir Jafar: Bengal would not have fallen into British hands so easily.

#### Challenge!

Negative trait, undesirable quality, brings in temporary gains but a person can never be trusted. Throw it open to students—see what they have to say.

#### **Lesson Plans**

#### Number of lessons: 4

**Duration:** 40 minutes

**Resources:** textbook and atlas

#### Lesson 1—The British East India begins its operations

#### **Teaching Objectives:**

- To introduce the British East India Company
- To explain how the British worked towards strengthening its presence in India

#### Learning Outcomes:

Students must be able to:

- describe how and when the British East India Company began operating
- identify and analyse the activities of the British East India Company
- explain how they strengthened their hold in India

#### Introduction (10 minutes):

Introduce the topic by doing a recap of how the British sought permission to trade during Jahangir's rule and never looked back.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Discuss the role of Thomas Roe, his charisma, and diplomacy in securing a mandate from Jahangir. Using the map as support, discuss the strategic location of the three presidencies and why the first factory was opened at Surat. Talk about the activities of the British, and how fast they moved in order to strengthen their foothold in India because they felt threatened by the French presence.

**Conclusion (5 minutes):** Recap the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Content review question, 1

#### Lesson 2—Struggle for control, Robert Clive, and the Battle of Arcot

#### **Teaching Objectives:**

- To introduce Robert Clive and explain his role in leading the British to victory against their main rival France
- To study the details of the Battle of Arcot—reasons, events, and outcome

#### Learning Outcomes:

Students must be able to:

- describe Robert Clive's strategies and tactics
- explain the events of the Battle of Arcot and the role of the British

#### Introduction and Vocabulary (10 minutes):

Introduce the lesson by summing up key points from the last lesson. Introduce Robert Clive as the key player in helping the British gain control of the empire.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Discuss who Clive was and why he was brought in. Analyse the planning, execution, and success of his strategies. Highlight and analyse the reasons for the Battle of Arcot. Discuss the parties involved in the battle and its outcome. Explain the positions of the Mughals, French, and British after this battle. **Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Inform the students about the topic of the next lesson—the Battle of Plassey. Answer student queries, if any.

Homework: Content review questions 2 and 3

### Lesson 3—The Battle of Plassey, Corruption in the East India Company, and the arrival of the Raj

#### **Teaching Objectives:**

- To describe the reasons, events, and outcome of the Battle of Plassey
- To discuss the corruption in the East India Company

#### Learning Outcomes:

Students must be able to:

- analyse the impact of the Battle of Plassey
- describe the attitude of the British East India Company

#### Introduction (10 minutes):

Revise the key points about Clive Roberts and the Battle of Arcot, and how they led to the Battle of Plassey.

#### Explanation (25 minutes):

Reading and parallel explanation from textbook. Talk about Clive's persistence and strategic maneuvering within the empire, pitting ruler against ruler and taking advantage of their weaknesses. Analyse the reasons, events, and the outcome of the Battle.

#### Conclusion (5 minutes):

Sum up the main points of the lesson. Give a preparatory talk for the next lesson– India under the British Raj.

Class work: Content review questions 4 and 5

Homework: Going Further

#### **Project/Activity**:

Students can enact the scene in *Aini's notes*. This can be done as an introduction to the lesson or as part of the explanation.

#### Lesson 4—Worksheet/Assessment sheet

#### **Teaching Objective:**

• To reinforce key events and people from the times of the British East India Company through written work

#### Learning Outcome:

• Students should be able to answer correctly.

**Instructions (5 minutes):** Explain the format of the worksheet to students. Address any queries.

Class work: 35 minutes

#### WORKSHEET

Date	e:	Name:
Q 1.	Cho	ose the correct answer.
	a)	The permission to trade with India was granted by (Queen Elizabeth I, Sir Thomas Roe, Queen Elizabeth II)
	Ь)	Spice Islands was the name given to the islands of (Malaysia, Japan, Indonesia)
	c)	Trouble in Bengal led to the Battle of (Buxar, Trichinopoly, Plassey)
	d)	Joseph Dupleix was the governor general. (British, French, Dutch)
	e)	The Nawab of Carnatic died in (1749, 1947, 1479)
	f)	Chanda Saheb asked the (British, Carnatic, French) for help, while Clive was helped by the governor of (Bengal, Mysore, Madras)
	g)	Nawab Siraj-ud-Daulah was the governor of (Carnatic, Bengal, Arcot)
	h)	The Battle of Plassey was won by the (Bengalis, French, British)
	i)	Mughal emperor asked for the British protection after the Battle of (Buxar, Plassey, Mutiny) in 1764.
Q 2.	Ansv	wer the following questions.

- a) Nawab Siraj-ud-Daulah drew up an agreement with the British against fortifications in Caclutta, and the extent of privileges extended to them.
  - (i) Why do you think he did so? What does it tell you about his trust in the British?

(ii) Did his opinion prove right or wrong?

HISTORY

Make a list of all the strategies that Clive used to win against the Indians. b) (i) (ii) What kind of a person do you think Robert Clive was? Give reasons to support your answer. Why was the state of Bengal such a coveted and sought-after territory by the British? 3. Complete the statements. 4. Fort William was constructed as a a) The British stirred up trouble in Bengal by b)

#### HISTORY

## CHAPTER 5 The British Raj

#### **Discussion points**

India was known as the 'Jewel in the Crown' of the British Empire because it was the richest of all British colonies. Natural and human resources were in abundance. It offered an opportunity to fill the treasury of the British Empire beyond imagination. The imperialists' arrogant indifference, insensitivity, and callousness resulted in suffering and misery for the locals, and reduced their comfort and riches to poverty. Anger and resentment started to surge. The first to realize the treachery of the British were Hyder Ali and his son Tipu Sultan of Mysore. Known as the first freedom fighters of the subcontinent, they dedicated their lives to the struggle for independence from the British.

Although marked by selfish interests, the British did make valuable contributions to the basic infrastructure of the subcontinent. Developing roads, railways, transport and communication, and new irrigation system were some of them. However, that did not appease the locals and they were not willing to trust the British any further. Their resentment and hostility remained unabated.

The anti-British sentiment boiled over when the Indian sepoys at Meerut were jailed on charges of insubordination. They had refused to bite open the new greased cartridges for their guns. The cartridges were rumored to be greased with cow or pig fat. Their arrest led to a furore among all Indian sepoys and civilians and they revolted. The suddenness of it all stunned the British but they managed to quell it after three days of violence. Bahadur Shah Zafar was named as the chief conspirator and instigator. His sons were killed and he was exiled.

The British wanted control of the forts of Jhansi and Gwalior and hence, tried to create a schism by introducing a new law on the inheritance of a state. The Rani of Jhansi and her loyal subjects understood the mischief. They fought the British and lay down their lives. All these events under the Raj were the build up to the storm—the partition of the subcontinent and the creation of India and Pakistan.

#### **ANSWER KEY**

**Content review** 

- A 1. Ruler of Mysore. They were the first to realize the intentions of the British and pioneered the independence struggle.
- A 2. Merits—development of transport and communication services, new irrigation systems. Demerits—removal of Indians from key jobs, high rates of taxation on local farmers, weavers and other craftsmen to keep them out of business, unjustified punishments, making English the local language, thus denying justice and education to all.

- A 3. Because of the Britain's selfishness and high-handedness; the Indians realized that they were being robbed of their homeland, resources, and identity.
- A 4. The insubordination of sepoys regarding the use of greased cartridges at Meerut
- A 5. Meerut, Lucknow, Allahabad, Jhansi, and Kanpur. British soldiers moved into these states with full force and resorted to a three day massacre which quashed the mutiny.

#### Going further

Open question. Judge answers for correctness and sensibility of argument, and how well the opinion is justified.

#### Challenge!

The Indians wanted to be free from the 'unofficial' British rule, and wanted them to leave their homeland. The British had no intentions of leaving India and considered any attempt to make them leave as mutiny.

#### **Lesson Plans**

#### Number of lessons: 5

Duration: 40 minutes

Resources: textbook and atlas

# Lesson 1—Attitude of the East India Company's employees and the first freedom fighters

#### **Teaching Objectives:**

- To explain the beginning of the British government in the subcontinent
- To make students aware of the high-handedness of the officials of the Company
- To describe the awakening and efforts of Hyder Ali and Tipu Sultan as the first freedom fighters of India
- To describe life under the British
- To describe and analyse the reasons, events, and outcomes of the War of 1857

#### Learning Outcome:

• Students must be able to describe all the events, their causes, and effects.

#### Introduction and vocabulary (10 minutes):

Recap the previous lesson. Talk about how the East India Company tried to strengthen their position and was prepared to go to any lengths to achieve their purpose. Discuss the key points of the first paragraph and emphasize on some of the things the Company did. Bring in Hyder Ali who recognised the British intentions and put up a strong fight.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Narrate the events in the lives of both father and son like a story, supported by the text. Explain their 'nationalist' spirit and how they have been lauded for taking this stand. They are regarded as the first Indian freedom fighters. Tell students that they laid the foundation for other nationalists' struggle for independence. Analyse the map on page 18 and talk about the location of the key battle sites and other cities.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Question 1 of *Content review*; read the section 'British rule' in chapter 5.

#### Lesson 2—British rule: merits and demerits

#### **Teaching Objective:**

• To describe life under the British government in India

#### Learning Outcome:

• Students should be able to identify the prospects and consequences of the British rule in the subcontinent.

#### Introduction (10 minutes):

Begin with a short informal quiz (oral or written) to reinforce reading assignment. Ask questions to gauge the extent of the students' reading and comprehension of text. Build up on the merits and demerits of British rule.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Take up each demerit and merit. Explain and discuss. Make the lesson interactive by asking students to put themselves in the place of the Indians of those times and imagine how they would have felt on realizing that their land was being robbed. Talk about how even the richest of men of those times were reduced to poverty if they didn't comply with the British orders. As far as merits are concerned, the British contributed a lot of the basic infrastructure. Discuss the introduction of railways and their impact. Proper roads, colonial style architecture, irrigation system, education reforms, introducing English language which ensured access to the modern knowledge base. Alongside, discuss the ways in which these reforms or developments also harmed the interests of the locals.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any. End the lesson with a briefing about the next lesson how the increasingly arrogant attitude of the employees of the Company and the frustrations and resentment of the locals were setting the stage for a clash.

Homework: Content review questions 2 and 3

#### Lesson 3—The War of Independence 1857

#### **Teaching Objective:**

• To inform students about the reasons, events, and the aftermath of the War of Independence

#### Learning Outcome:

• Students must be able to retain and explain the reasons, events, and effects of the War of Independence.

#### Introduction (10 minutes):

Discuss how the locals were angry and frustrated because they knew they were being deprived of their rightful share of resources and a comfortable if not rich lifestyle. The bottled resentment burst out on a trigger—greasing of cartridges with animal fat.

#### Explanation (25 minutes):

Discuss how religious values have always been important for the locals of the subcontinent. Even though there were differences in rituals and customs among the Muslims and Hindus, a general environment of tolerance and respect for each other existed. Cows were sacred for the Hindus and pigs were abhorrent for the Muslims. The British indifference and insensitivity towards this detail, led to a clash between Indian sepoys and British officers at Meerut when sepoys refused to bite open cartridges greased with animal fat. Things flared up from that point. A revolt began which shook the foundations of British East India Company. Had the locals been more strategic, equipped, and less emotionally charged, it might have led to the restoration Indian self-rule.

#### Conclusion (5 minutes):

Conclude on how the mutiny strengthened the British colonisation of India. The East India Company was dissolved to bring in a stronger power—the Crown. Read aloud *Aini's notes* on the Rani of Jhansi like a story or have it enacted by a group of students.

Homework: Revise and recap chapter. Mark difficulties/confusions, if any.

#### **Projects/Activities:**

- 1. Select a few students and enact Aini's notes on the Rani of Jhansi.
- 2. Research.

**Option a.** Make a list of colonial buildings in your city/provincial capital. Write down their names, year of construction, purpose, get pictures if possible. Discuss the architecture—how it is typically colonial or how different it is from the rest of the architecture in the city.

**Option b.** Give students a list of buildings in various parts of Pakistan and ask them to write down their names, year of construction, purpose, get pictures if possible. Discuss the architecture—how it is typically colonial or how different it is from the rest of the architecture in the city.

**Option c.** Show the photographs of some colonial buildings and have an art project. Have students make a display with brief write-ups.

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#### Lesson 3—Worksheet/Assessment sheet

#### Teaching Objective:

• To reinforce ideas about life under the British and the War of Independence through written work

#### Learning Outcome:

• Students should be able to answer correctly.

**Instructions (5 minutes):** Explain the format of the worksheet to students. Address any queries.

Class work: 35 minutes

#### WORKSHEET

Dat	te:	Name:	
1.	Fill	Fill in the blanks.	
	a)	Hyder Ali and Tipu Sultan were independent rulers of the south Indian state of	
	b)	Hyder Ali ruled for years.	
	c)	Tipu Sultan was killed in	
	d)	The British government passed the Government of India Act in and abolished the `s rule.	
	e)	India finally came directly under the Crown in	
2.	Exp	lain the following terms and phrases.	
	a)	The Crown	
	Ь)	The Company	
	c)	Hyder Ali remained a formidable rival for the British.	
	d)	The British ruled the subcontinent with insensitivity and arrogance.	
	e)	They attempted to Europeanize the Indian culture.	
3.	Ans	wer the following questions.	
	a)	Why did the East India Company become unpopular?	
	b)	What measure(s) did the British government take to keep the activities of the East India Company in control?	

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c) 'By 1856, almost all of India had come under British rule either directly or indirectly through the local princes acting on British orders.' What does the word 'directly' mean?

d) Describe the 'Doctrine of Lapse.'

- e) Who introduced the 'Doctrine of Lapse'?
- f) How did the British use it against the Rani of Jhansi?

g) Why did the Rani of Jhansi and her subjects rise against the British?

HISTORY

Why did the Indians lose the War of Independence in 1857? h)

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#### HISTORY

**CHAPTER 6** 

# The Subcontinent after the War of Independence

#### **Discussion points**

The British emerged stronger after the War of Independence. Instead of being controlled by a group of people on the pretext of trade, India officially became part of the British Empire. The belief that Bahadur Shah Zafar was the principal instigator, along with Hyder Ali and Tipu Sultan's stand against them still fresh in their memories, the British started showing anti-Muslim sentiments and began to favour the Hindus. Resorting to the 'divide and rule' policy, they offered key posts and privileges to the Hindus, wanting to appease their hostility towards the British on the one hand and weakening the Muslims on the other. This left the Muslims feeling very insecure about their status and identity in the subcontinent.

However, the British did not have much sympathy for the rest of the Indians. This callousness surfaced during the World Wars where Britain went to war and utilized India's economic and human resources to pay for the costs of war. Rising awareness of western political systems among the Indians led to the creation of platforms like the All India Congress, and later the All India Muslim League. This gave rise to nationalism in the subcontinent. During this combined struggle for independence, the Muslims developed the mistrust that even after the British had left, their condition would be no better because they will remain in minority. Congress policies and Hindu nationalism further strengthened their fears. The British finally left the subcontinent but not before a bloody and violent sequence of events that led to the creation of Pakistan and India.

The nationalist leaders who have been instrumental in the creation of Pakistan and India are Mohammad Ali Jinnah, Mohandas Karamchand Gandhi, Jawaharlal Nehru, Maulana Shaukat Ali and Maulana Mohammad Ali Jauhar, Maulana Abul Kalam Azad, Chaudhary Rehmat Ali, Allama Iqbal, and Dadabhai Naoroji—one of the earliest advocates of freedom and one of the founders of the Congress.

#### **ANSWER KEY**

**Content review** 

- A 1. Because it was a British colony
- A 2. Economic—wealth spent on financing the wars, price hikes, inflation; Human—loss of slodiers' lives and affected families; Pyschological resentment, anger mistrust, hopelessness
- A 3. Compare with the definition on page 35.
- A 4. Muslims would remain a minority as they existed in a ratio of 1:4. The realization that they could no longer exist as one peaceful nation because of the hatred the British stirred up by resorting to favouritism.

A 5. Policies of the Congress and the attitude of Hindu nationalists, deepening fear and widening gap

#### **Going further**

a. Make a checklist. Get them to think by giving them some clues from the list. Do a brainstorming session with the points on the board. Ask students to formulate their opinions.

#### For

Interests of the state become a priority Common cause unites all standing under the umbrella Bonding with people with the same interests and cause Creates ownership for the state Better social and military structures Fewer differences of opinion and conflicts of interest Motivates individuals and brings about progress

#### Against

Superiority complexes develop Minorities feel insecure Can lead to extremism, hatred, and intolerance Can hamper progress Could encourage violence

#### Challenge!

Open-ended question. Evaluate students for stating facts and reasoning sensibly. Provocation by the British, realization of identity issues, chances of future clashes.

#### Lesson Plans

#### Number of lessons: 5

Duration: 40 minutes

**Resources:** textbook and atlas

# Lesson 1—The beginning of the Hindu-Muslim divide and the effect of the World Wars on India

#### **Teaching Objectives:**

- To describe the aftermath of the War of Independence
- To explain how the World Wars affected British India

#### Learning Outcome:

• Students should be able to describe the impact of the War of Independence and the two World Wars on British India

#### Introduction (10 minutes):

Recap the previous chapter, stressing on the reasons, events, and outcomes of the War of Independence. After becoming part of the British Empire, the British adopted a strict attitude with the Indians. The World Wars changed the political scenario for the British in the subcontinent—they were forced to leave earlier than they had imagined.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Talk about the reasons for the war. Use the atlas to look at the geographical location of the European countries which went to war. Compare it with India's location. Ask students how they think logistics of war were worked out. What would the soldiers have felt? Is it a good feeling to be forced to fight for some other country? The Indians finally realized that they were being cheated of their own resources while the Crown kept getting richer and richer. At this stage, many nationalist leaders sprung into action with talks of freedom for India.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Content review questions 1 and 2

#### Lesson 2—The rise of Indian nationalism

#### **Teaching Objectives:**

- To explain how the War of Independence led to the rise of Indian nationalism
- To describe briefly the struggle for Indian independence
- To describe briefly the movement for a separate Muslim country

#### Learning Outcomes:

Students should be able to:

- describe the idea of nationalism
- describe what led to the demand of a separate country for the Muslims

#### Introduction and explanation (10 minutes):

Recap the Indians' reasons for resentment towards the British and explain the meaning of nationalism. Give reasons for the rise of Indian nationalism. Stress on how the Muslims and Hindus were coexisting as one nation at this stage. Highlight the points on which the Muslims were insecure. Talk about the pro-Hindu sentiments of the British used as a divide and rule policy to break up India. That was the ultimate goal of the British before moving out. They played on nationalist sentiment and fuelled animosity between the Muslims and the Hindus.

#### Conclusion (15 minutes):

Sum up the chapter, highlighting key concepts. Provide a link to Pakistan Studies in the next class.

Class work: Content review question 3

Homework: Content review questions 4 and 5

#### Lessons 3—Nationalist leaders in the Freedom Movement—The Quaid-i-Azam

#### **Teaching Objectives:**

- To discuss the role of some nationalist leaders in the creation of Pakistan and India
- To talk about Mohammad Ali Jinnah's role as a nationalist leader

#### Learning Outcome:

• Students should be able to talk about the role played by Mohammad Ali Jinnah in the Freedom Movement

#### Introduction (10 minutes):

Ask students if they know the names of any nationalist leaders. Begin with Mohammad Ali Jinnah and have a mini oral quiz to see how much the students know about him. Talk about how important it is for a leader to have perseverance and foresight in order to achieve goals.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Discuss Jinnah's struggle for independence and the reasons for his viewpoint. Go over his quotes and ask students to identify how they relate to his vision and achievement. What do these quotes say about him as (a) a person and (b) his leadership qualities?

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any. Discuss the reason for having his photo in all government and state buildings.

#### Lesson 4—Gandhi, The Ali Brothers, and Chaudhary Rehmat Ali

#### **Teaching Objective:**

• To discuss the role of other important nationalist leaders in the creation of Pakistan and India

#### Learning Outcome:

• Students should be able to describe the roles played by Gandhi, the Ali Brothers, and Chaudhary Rehmat Ali in the Freedom Movement.

#### Introduction (10 minutes):

Bring up the Jinnah-Gandhi photograph on page 38 of the textbook and ask students what it brings to mind. Discuss the united stand of both leaders on freedom from the British, and how tirelessly and selflessly they worked towards obtaining this freedom. Mr Gandhi's role in supporting the Quaid cannot be undermined, and hence his name is important for the nationalist movement in Pakistan as well.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Discuss Gandhi's non-violent policy and his efforts and sacrifices. Talk about his austerity and shrewdness, and also discuss how many of his own people could not understand him and his principles. Move on to the Ali Brothers and Chaudhary Rehmat Ali and discuss their roles in achieving freedom.

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Also point out that Jinnah, Gandhi, and Chaudhary Rehmat Ali did not live long after the Partition. (The Ali Brothers died before the Partition.)

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any. Give instructions for the activities in *Going further*.

Homework: Going further exercise (b)

Project/Activity: Going further exercise (a)

#### Lesson 4—Worksheet/Assessment sheet

#### **Teaching Objective:**

• To reinforce ideas about nationalism, the reasons for the rise of Indian nationalism, and the reasons for separate Muslim-Hindu states through written work

#### Learning Outcome:

• Students should be able to answer correctly.

**Instructions (5 minutes):** Explain the format of the worksheet to students. Address any queries.

#### WORKSHEET

Date: 🗕	Name:
	me of the following statements given below are not true. Pick them out and write the rrect answer.
a)	The Muslims and Hindus never coexisted peacefully in the subcontinent.
b)	The most important outcome of the war of 1857 was the transfer of power to the Crown.
c)	The 1857 war widened the gap between the Muslims and the Hindus.
d)	The British had pro-Muslim and anti-Hindu sentiments.
e)	The cost of going to war as a British colony brought peace, prosperity, and stability to India.
f)	The All India Muslim League was formed to safeguard Muslim interests and ideologies.
g)	Pakistan and India emerged as two separate countries after a peaceful struggle.

- 2. Fill in the blanks.
  - a) The First World War began in \_\_\_\_\_.
  - b) The Western Powers consisted of \_\_\_\_\_, \_\_\_\_ and
  - c) The Central Powers comprised the \_\_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ and \_\_\_\_\_ empires and the kingdom of \_\_\_\_\_\_.
  - d) The Second World War began in \_\_\_\_\_ and ended in \_\_\_\_\_.
  - e) The identification of people as a distinct group based on their geographical location, country, religion, or ethnic background is called \_\_\_\_\_\_.
- 3. Answer the following questions.
  - a) What were the causes of the First World War?

b) Why is World War II considered to be worse than the World War I?

- c) Why did the Indians begin to mistrust the British?
- d) What were the key thoughts and ideas behind the creation of the All India Congress and the All India Muslim League?

# GEOGRAPHY The Atmosphere

#### **Discussion points**

The atmosphere is a protective layer of gases that envelops the Earth. It is composed of nitrogen (78%) oxygen (21%) and traces of carbon dioxide, ozone, helium, argon, etc. The atmosphere is divided into layers based on their distance from the Earth and each layer has its own uniqueness and purpose. The composition and structure of the atmosphere are important because they regulate the filtering of harmful rays of the Sun. Human activity on Earth affects this composition and structure. Unmonitored and uncontrolled gas and fume emitting activities damage the ozone layer and cause the greenhouse effect, which creates global warming.

#### **ANSWER KEY**

**Content review** 

- A 1. Protection against excessive radiation, falling meteors, and debris from space. It also generates weather, which is important for all life on the planet.
- A 2. Troposphere, stratosphere, mesosphere, thermosphere
- A 3. Filters harmful ultraviolet rays from the Sun. These rays can cause eye problems and skin cancer, damage marine life, affect agriculture and agricultural produce.
- A 4. Gases like carbon dioxide and water vapour prevent heat from escaping back into space, resulting in rising global temperature. The heat is causing ice caps to melt. There is acid rain, rising sea levels, ocean acidification, global warming, change in temperatures. The main reason is rapid rate of fuel consumption—excessive fuel is burned and carbon dioxide is released into the air.
- A 5. Hot and cold currents that blow simultaneously and generate energy. This creates breezes on land and waves in water.

#### **Going further**

- a. Use of fuel driven conveyances, generators, and other such appliances. See what the students come up with.
- b. Suggest car pooling as one solution and ask them to think of more.

#### Challenge

Page 46: Because they are close to sea and the rate of evaporation is much higher as compared to inland or landlocked areas.

Page 47: Initially there would be excessive water in rivers, and once that water gets used up and dried, there would be water shortage as their sources would have gone. Coastal areas and cities face the threat of submersion as sea levels will rise several feet.

#### **Lesson Plans**

#### Number of lessons: 5

Duration: 40 minutes

Resources: textbook and atlas

#### Lesson 1—The atmosphere and its layers: composition and purpose

#### **Teaching Objective:**

• To explain the composition and structure of the atmosphere

#### Learning Outcome:

• Students should be able to describe the composition and the layers of the atmosphere.

#### Introduction and vocabulary (10 minutes):

Ask students what would happen if the cover of their book or the wrapping paper of a gift or a part of their clothing gets torn? What would happen to the material it was covering? Similarly, the atmosphere is an invisible protective covering of the Earth made of gases and it prevents harmful radiation from damaging the Earth. Use the illustration on page 43 to introduce the layers of the atmosphere.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Using the illustration on page 43, explain the purpose and composition of each of the layers. Explain atmospheric pressure and its importance. Ask students if they have noticed the air pressure on board an aeroplane and the arrangement of oxygen masks. Why is this necessary?

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any. Ask students to think what would happen if this 'protective film/cover' were to be destroyed. Write down answers on the board and review.

Homework: Content review questions 1 and 2

#### Lessons 2 and 3—Environmental issues and ozone layer

#### **Teaching Objective:**

• To explain some environmental issues affecting the atmosphere



#### Learning Outcomes:

Students should be able to:

- identify threats to the Earth's environment
- define the terms 'global warming' and the 'greenhouse effect'

#### Introduction (10 minutes):

Recap answers from the concluding activity in the last class with the help of an oral quiz. Write these three examples on the board and ask students to give their observation for them: (a) exhaling on a mirror or glass (b) walking close to a generator or air conditioner or a vehicle and (c) a tear or hole in a blanket. Demonstrate the damage caused by the greenhouse effect, global warming, and depleting ozone layer.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Using the examples, explain the three concepts and their impact on Earth and its inhabitants. Use the diagram on page 45 of the textbook to elaborate. Make the lesson interactive by asking for student feedback on causes, effects, and solutions.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any. Give instructions for *Going further* (a), (b), and (c).

Homework: Content review question 4. Going further (a), (b), and (c)

#### Lesson 4—Factors influencing climate

#### **Teaching Objective:**

• To explain how atmospheric factors influence the climate

#### Learning Outcomes:

Students should be able to:

- explain air pressure and circulation
- identify factors that affect climate

#### Introduction (10 minutes):

Begin the lesson by asking students to compare the climate of different places they might have visited. Discuss the differences. Ask if they know the reasons for these variations.

#### Explanation (25 minutes):

Reading and parallel explanation from text. List the factors that influence climate and explain in detail. Use the pictures on pages 46 and 47 of the textbook as support. Ask students if they have noticed what happens when the air conditioner is switched off and a fan is switched on. You feel a sudden breeze of warmer air. Why does that happen? Explain the concept of hot air rising and cooler air being below. Demonstrate saturation with the help of a wet towel.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any. Explain *Going further* exercise (d).

Homework: Content review question 5. Going further exercise (d).

#### **Project/Activity**:

Students can be divided into groups and asked to have a display and presentation of the topic. They can show the layers of the atmosphere, demonstrate humidity and precipitation, damage to the ozone layer, greenhouse effect.

#### Lesson 5—Worksheet/Assessment sheet

#### **Teaching Objective:**

• To reinforce key concepts about the atmosphere through written work

#### Learning Outcome:

• Students should be able to answer correctly.

**Instructions (5 minutes):** Explain the format of the worksheet to students. Address any queries.



#### WORKSHEET

Dat	e:	Name:
1.	Fill	in the blanks.
	a)	The is a layer of gases that surrounds the Earth's surface.
	Ь)	The first layer of the atmosphere is the and it is around km thick.
	c)	As you travel in the atmosphere, you experience a drop in air pressure and temperature.
	d)	When fuel burns, is released into the atmosphere.
	e)	More heat is trapped on Earth, resulting in increasing all over the globe.
	f)	If all melts, sea levels will rise and many low lying coastal areas will be submerged under water.
	g)	The ozone layer is developing because of chemical reactions between atmospheric gases and man-made chemicals.
2.	Ider	ntify the following from the given descriptions.
	a)	The coldest layer of the atmosphere
	Ь)	Hot and cold currents that blow simultaneously and create energy
	c)	Too much water in the atmosphere
	d)	Amount of moisture in the atmosphere
	e)	The unique layer of the atmosphere
3.	Wh	at is the difference between
	a)	Troposphere and thermosphere
	Ь)	Greenhouse effect and global warming

- c) Atmospheric temperature and atmospheric pressure
- 4. Complete the cause and effect table.

	Cause	Effect
The ozone layer is developing holes.		
Excessive amounts of carbon dioxide are being emitted into the atmosphere.		
The average temperature of the Earth is rising.		
More heat is being trapped on Earth instead of being released into space.		
It becomes hot and stuffy before rainfall.		

# GEOGRAPHY All about Winds

#### **Discussion points**

Wind is one of the most important renewable resources available to mankind. Uneven heating of the Earth's surface causes wind speed and direction which regulate weather. Just like the convection currents in the ocean, winds blow because of currents of hot and cool air replacing each other, creating wind energy. Surface winds are winds of regular speed that blow around us every day. The bulge of the Equator brings steady, trade winds towards the centre of the Earth. Places on or near the coastal areas are cooler because of land and sea breezes. Land heats up faster than the sea, and rises and moves towards the sea. The cool air over the sea moves towards the land. This is called the sea breeze. At night, land also cools down faster than the sea. The cooled air blows towards the sea to take the place of warmer air that has risen above from the surface of water.

Monsoons are rain-bearing winds that blow in coastal, tropical regions. The cycle of land and sea breezes cause air to heat up and rise in repeated, larger scales. The landmass remains hotter during the day and cooler during the night, creating low pressure. In summers, sea breezes bring saturated rain clouds because the rate of evaporation is higher. In winters, the land is cooler and hence, no rain bearing winds blow from the sea.

Cyclones are destructive, fast winds that blow in a circular motion. In the northern hemisphere, they move in an anticlockwise direction and vice versa in the southern hemisphere. Anticyclones move clockwise in the northern hemisphere and vice versa in the southern hemisphere.

Wind speeds and directions are measured with a variety of instruments and devices.

#### **ANSWER KEY**

**Content review** 

- A 1. Because of the uneven heating of land and sea surfaces, seasons, and effect of the pressure belts
- A 2. They have a cooling effect, enable ships to sail, bring rain clouds, help in pollination.
- A 3 i. weather vane shows wind direction
  - ii. an instrument for measuring wind speed and pressure
  - iii. shows wind direction

- A 4 i. hurricane—a cyclone over water. Tornado—a cyclone on land.
  - ii. Dust devil—a small whirlwind that sucks up dust and sand. Twister—a column of debris and dust created by a tornado
  - iii. Breeze—a soft gentle breeze. Gale—wind stronger than breeze and milder than stormy winds
- A 5. Cyclones are stormy winds that blow in an anti-clockwise direction in the northern hemisphere and clockwise in the southern hemisphere. Anticyclones blow clockwise in the northern hemisphere and vice versa in the southern hemisphere.

**Going further** 

Students must keep the following points in mind. Age of the person being interviewed, year of incident, time, place, an account of what happened, extent of damage, personal feelings, opinion of person narrating account.

#### **Lesson Plans**

#### Number of lessons: 4

Duration: 40 minutes

Resources: textbook and atlas

### Lessons 1 and 2—What is wind, why winds blow, and classification of winds according to speed and direction

#### **Teaching Objectives:**

- To explain how winds blow
- To describe different kinds of wind

#### Learning Outcomes:

Students should be able to:

- describe the actions of winds
- identify different kinds of winds

#### Introduction (10 minutes):

Introduce lesson by asking students what sailboats, kites, and windmills run on. Ask how they think air and wind are different. Explain that wind is energy while air is not. Compare wind with other sources of energy like coal, oil, and natural gas, and ask students the advantages and disadvantages of wind as one form of energy over the others.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Explain the different types of winds and the directions in and from which they blow. Talk about land and sea breezes and how they regulate temperature. Emphasize on the directions from which different winds blow and how they affect temperature.



**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any. Explain *Going further*.

Class work: Content review questions 1 and 2

Homework: Going further

#### Lesson 3—Cyclones and anticyclones

#### **Teaching Objectives:**

- To explain methods of measuring wind speed and direction
- To explain the occurrence and effects of cyclonic winds
- To differentiate between cyclones and anti cyclones

#### Learning Outcomes:

Students should be able to:

- name different methods used to measure wind speed and direction
- define cyclones and anticyclones.

#### Introduction (10 minutes):

Recap important points from previous lesson. Ask them to read out their research. Write down important points. Define cyclones and anticyclones.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Use the pictures and illustrations to support explanation. Clarify the causes and effects of cyclones. Differentiate between cyclones and anticyclones. Talk about the damages that cyclones and high winds cause. Compare damages with other natural disasters. Explain how a windsock and a wind vane work.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any. Have a discussion asking students what measures they would take to minimize damage during cyclones.

Homework: Content review questions 3 and 5

#### Lesson 4—Worksheet/Assessment sheet

#### **Teaching Objective:**

• To reinforce key concepts about winds through written work

#### Learning Outcome:

• Students should be able to answer correctly.

**Instructions (5 minutes):** Explain the format of the worksheet to students. Address any queries.

#### WORKSHEET

Dat	e:	Name:
1.	Cho	ose the correct answer.
	a)	Winds blow from different (speeds, directions, heights)
	b)	Winds that blow steadily towards the Equator are called (trade winds, monsoon winds, pressure winds)
	c)	A sea breeze blows from the sea towards the land during the (evening, night, day)
	d)	Land breeze blows from the land towards the sea at (mid-morning, night, day)
	e)	Cyclones blow at speeds of more than kph. (100, 200, 400)
	f)	Wind speed is measured in (knots, nauticals, anemometer)
2.	Ans	wer the following questions.
	a)	What happens when land or water surfaces absorb sunlight?
	Ь)	Why are trade winds important?



c) Explain land and sea breezes with the help of a diagram.

d) Explain how an anemometer works.

**CHAPTER 9** 

## GEOGRAPHY Climatic Zones and the Wildlife

#### **Discussion points**

All things in nature are interdependent. The position of the Earth, its tilt, bulge, and movements determine the amount of sunlight reaching the Earth at different times and places, and for varying lengths of time. This brings about seasons, climate, and weather, which affect life and life-supporting conditions on Earth. This environment affects all humans, their activities, flora, fauna, and the relationships between them.

#### **ANSWER KEY**

**Content review** 

- A 1. The community of animals, plants, and their habitat
- A 2. forests, rainforests, grasslands and savannahs, deserts, tundras, marine, and freshwater biomes
- A 3. grasses, shrubs, trees, cacti and other succulents, creepers, and vines
- A 4. i. Grasslands and savannahs—wild animals like lions, cheetahs, hyenas, zebras, baboons, impala.
  - ii. Taiga—deer, wolves, rodents.
  - iii. Rainforests—gorilla, jaguar, snakes, parrots, bats
- A 5. Five
- A 6. By the amount of sunlight that reaches them. Also classified by depth and location within the ocean.

#### **Going further**

- a. Open-ended question. Mark answers with reference to text.
- b. Open question. Mark answers with reference to text.
- c. Animals: Types of fish, oysters, sponges, lobsters, crabs, migratory birds. Plants: the Rhizophora mucronata locally called Kumri.

#### Challenge

Cutting down trees in forests and creating land for construction; cutting through mountains in order to make roads, bridges, and buildings; using up desert space for construction; hunting animals for commercial purposes; cutting down trees for firewood and other purposes

#### **Lesson Plans**

Number of lessons: 5

**Duration:** 40 minutes

**Resources:** textbook and atlas

#### Lesson 1—Climatic zones of the world and vegetation

#### **Teaching Objective:**

• To identify the major climatic zones of the world and basic classification of vegetation

#### Learning Outcomes:

Students should be able to:

- identify the major climatic zones and the countries that lie within them
- remember the classification of vegetation

#### Introduction (10 minutes):

Ask students if they remember reading about the Earth's features and movements in Class VI. For the benefit of new students, recap the features and movements and explain how they affect temperature on Earth. Climatic zones are the result of these varying amounts of heat.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Explain the three broad climatic zones and how they are categorized. Discuss the importance of temperature for sustaining life and why vegetation is important for humans and animals. Go over each kind of vegetation and talk about its importance.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Read the lesson.

#### Lesson 2 and 3—Biomes and natural habitats of the world: forests

#### **Teaching Objectives:**

- To explain the concept of biomes
- To introduce the major biomes of the world and their flora and fauna
- To discuss some land biomes

#### **Learning Outcomes:**

Students should be able to:

- identify the different biomes of the world
- identify the flora and fauna found in land biomes

#### Introduction and vocabulary (10 minutes):

Introduce the lesson by asking students about a river and the life it supports. Make a chain/circle of dependence on the board and write down points. Ask students what would happen to each member of the river system if it becomes polluted or dries up. Are they independent of each other? Explain the difference between a habitat and biome.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Name the different types of biomes and their categories. Use the pyramid on page 59 of the textbook to explain how and where these biomes exist. Look at the map on page 60 of the textbook and compare biome distribution with the world map to identify locations. Explain forests, rainforests, grasslands and savannahs, deserts, and tundras with reference to climate, vegetation, animals, and uses.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Content review questions 1-4

#### Lesson 4—Marine and freshwater biomes

#### **Teaching Objectives:**

- To introduce the water biomes and their flora and fauna
- To identify layers of the ocean and the differences between them

#### Learning Outcomes:

Students should be able to:

- identify the flora and fauna found in marine and fresh water biomes
- identify the layers of the ocean

#### Introduction (10 minutes):

Introduce the word marine and its meaning. Talk about the uniqueness of this biome in terms of size and diversity. Explain the difference between marine and freshwater biomes.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Explain both biomes on the same pattern and compare. Discuss pictures, illustrations, and layers of the ocean. Discuss *Going further* (a), (b), and (c).

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Content review question 6

#### Lesson 5—Worksheet/Assessment sheet

#### **Teaching Objective:**

• To reinforce key concepts of land and marine and freshwater biomes through written work

#### Learning Outcome:

• Students should be able to answer correctly.

**Instructions (5 minutes):** Explain the format of the worksheet to students. Address any queries.

GEOGRAPHY

#### WORKSHEET

Date	:	Name:
Q 1.	Ans	wer in one word.
	a)	The hottest climatic zone
	Ь)	All kinds of plants growing in a particular area
	c)	Short plants with fleshy thorny leaves
	d)	The home or natural surroundings of any living thing
	e)	A biome characterized by the variety and abundance of trees in close clusters
	f)	Trees that shed their leaves in winter
	g)	'Treeless land'
	h)	The deepest zone in the ocean
	i)	The zone in the ocean where the water starts getting colder and water pressure increases
	j)	The ability to create light within themselves in some animals
	k)	Swamps, marshes, and bogs
Q 2.	Com	plete the table.

Biome	Description	Plant and vegetation	Animals
Rainforests			
Deserts			
Forests			
Freshwater biomes			
Tundras			
Grasslands and savannahs			

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**CHAPTER 10** 

## GEOGRAPHY Conservation of Natural Resources

#### **Discussion points**

Conservation of natural resources is the need of the hour. Water, oil, coal, gas, forests, and other resources are being used up at alarmingly high rates and these are all non-renewable resources needed to sustain life and life functions. Water is the most important of these resources and is being used wastefully.

#### **ANSWER KEY**

**Content review** 

- A 1. Saving for future use
- A 2. Water, fuel, forests, land and soil, flora and fauna, habitats and biomes
- A 3. So that the resources on our planet do not run out completely and our future generations can also use them.
- A 4. A target of conservation is the purpose or aim for conserving resources. Our target should be to (i) protect resources from waste and losses, (ii) protect them from changes that can cause injury, decay, waste, or loss, and (iii) reduce their use.
- A 5. Water reduction refers to the cut down in the use of water in order to conserve it. However, it has to beneficial. For example, rice fields require about 2-5 inches of standing water. If a farmer decides to conserve water and reduces this amount to an inch or less, that would destroy the crop, and instead of being beneficial, this water reduction would be damaging.

A 6. Break up: 70% for irrigation, 22% for industry, 8 % domestic use

#### **Going further**

Read WWF Pakistan's mission statement at: http://www.wwfpak.org/ aboutwwf/index.php.

This can also be provided as a printout to all the students. If possible, get in touch with a WWF representative for a visit. They hold activities for schools.

Challenge

When there is a shortage of natural resources, prices of available resources increase. Only the rich can afford to purchase and that too not freely. The poor man, who has an equal share in these resources, loses out because he cannot afford those high prices.

#### **Lesson Plans**

Number of lessons:

Duration: 40 minutes

**Resources:** textbook and atlas

#### Lesson 1—What is conservation and why the need to conserve

#### **Teaching Objectives:**

- To explain the meaning of conservation and its extent
- To describe the depletion of natural resources

#### Learning Outcomes:

Students should be able to:

- identify the practices that threaten natural resources
- identify practices that can help in conservation

#### Introduction (10 minutes):

Divide class into groups. Cut out five strips of paper, and write one of the following statements on one strip. Can you think of a world without land? Can you think of a world without fuel? Can you think of a world without soil? Can you think of a world without vegetation/flora? Can you think of a world without animals/fauna? Hand out each strip to a group and ask them to do a 5-minute futuristic write up on their topic. Have each group read out their write up.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Continue reading of the write-ups and see what kind of a world they foresee without these resources. Write points on board and explain the concept and targets of conservation.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Content review questions 1-4

#### Lesson 2—Water conservation

#### **Teaching Objective:**

• To describe the problem of water shortage

#### Learning Outcome:

• Students should be able to describe the ways in which water shortage can affect our planet.

#### Introduction (10 minutes):

Write the statement 'Can you imagine a world without water?' Take student feedback orally or written. Recap main ideas from the previous lesson and introduce the challenge question with reference to water.

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#### Explanation (25 minutes):

Reading and parallel explanation from text. Discuss and generate feedback on water statistics. Most students will have experienced water shortage at some point in their lives. Talk about how they felt, even when the shortage was temporary.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any. End on the *Do You Know?* box on page 84 of the textbook.

Homework: Content review questions 5 and 6

#### **Project/Activity**:

Make a water management plan for each of the following consumers.

Consumer	Uses of water	How to manage	Outcome
Factory owner			
Farmer			
Domestic servant			
Gardener			
Yourself			

#### Lesson 3—Worksheet/Assessment sheet

#### **Teaching Objective:**

• To reinforce key concepts about conservation through written work

#### Learning Outcome:

• Students should be able to answer correctly.

**Instructions (5 minutes):** Explain the format of the worksheet to students. Address any queries.

GEOGRAPHY

#### WORKSHEET

Dat	e:	Name:
1.	Fill	in the blanks.
	a)	Energy is obtained from
	b)	Coal, petroleum, and natural gas are sources of energy.
	c)	Scarcity of resources can cause an in the ecosystem.
	d)	People who are trying to preserve and protect the Earth's resources are called
	e)	Humans need water to survive.
	f)	As grows, the use of natural resources also increases.
	g)	The World Bank statistics show that as many as people have no access to clean water.
	h)	A dripping tap can waste litres of water a day.
2.	Exp	lain the following terms:
	a)	Depletion
	b)	Imbalance in the eco system
	c)	All cities and towns must have conservationists.
	d)	Water withdrawal
	e)	Desiccation of rivers
	f)	Exploitation of water resources
	g)	Water resource management plans
3.	Ans	wer the following questions.
	a)	Why is there a shortage of water even though 70% of the Earth is made up of water?
	Ь)	What is the average daily human consumption of water in the world?

c) Why is water the most important natural resource?

# CHAPTER 11 GEOGRAPHY Population

#### **Discussion points**

Population is the number of people living in a defined region. It has an effect on the natural resources and development of that region. Population growth usually shows growing trends except in cases where there has been migration in large numbers due to natural disasters or other reasons. Availability of natural resources like water and arable land attract people. Human factors like jobs and education, etc. also affect population growth. The study of population and its characteristics is called demography. Data and statistics comprise of concepts like population ethnicity, population density, population explosion, etc. and they help to establish trends and patterns. These are useful tools for planning and development in countries.

#### **ANSWER KEY**

**Content review** 

- A 1. The number of people living within a particular region—town, village, city, country, continent.
- A 2. Availability of water, natural features like flat land, climate, fertile soil, vegetation and other natural and man-made resources. Demographic features include job opportunities, comfortable lifestyle, close proximity with family, etc.
- A 3. The number of people living in a given area.
- A 4. Social factors include the distribution of resources according to population: a densely-populated area is more likely to face shortages of resources like water, electricity, public transport, etc. People take these factors into account before deciding to make their home in a city or rural neighbourhood. Family structures and value systems also play their part: many people wish to remain close to their families or maintain joint families. This affects their choice of an area or city for living.
- A 5. Over 180 million

**Going further** 

Open-ended questions

Challenge

- a) 22.7 approximately
- b) 9 approximately

- c) Pakistan's population density is greater than Oman's.
- d) Analytical question
  - i. Students can compare the population densities of various countries and plot their findings on a graph.
  - ii. Make this a research based question or a class activity. Brainstorm for ideas.

#### **Lesson Plans**

#### Number of lessons: 3

Duration: 40 minutes

**Resources:** textbook and atlas

#### Lesson 1—Population and factors affecting population

#### **Teaching Objectives:**

• To explain the term 'population' and related terms

#### Learning Outcomes:

Students should be able to:

- define 'population' and give reasons for its growth or decline
- define 'demographics' and associated terms
- explain Pakistan's population-related problems

#### Introduction (10 minutes):

Introduce the concept of population by using your class as an example—the number of students within a defined area. Talk about the population (student strength) of your school and the size of the building.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Ask students to note and compare the number of students and the size of different classrooms. Are the rooms all the same size? Is the number of students per class the same? How does that affect the condition of the class? Explain the effect of population on natural resources. Similarly explain the rush at the canteen or under the shade or on the swings, etc. Discus how people tend to move towards areas that have something to offer.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Content review questions 1 and 2

#### Lesson 2—Population statistics

#### **Teaching Objective:**

• To introduce the idea of the study of population

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#### Learning Outcomes:

Students should be able to:

- define 'demographics' and associated terms
- explain Pakistan's population-related problems

#### Introduction (10 minutes):

Recap questions from the previous lesson. Use the *Challenge* question on page 91 of the textbook as an activity. Explain key concepts used in compiling statistics. Use simple examples/activities in class to explain depopulation, population density, overpopulation, etc.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Ask students what would attract them to move to a certain place. Use *Going further* exercises (a) and (b) as activities to reinforce key concepts.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Content review questions 3-5

#### **Project/Activity**

Going Further and Challenge

#### Lesson 3—Worksheet/Assessment sheet

#### **Teaching Objective:**

• To reinforce key concepts about population through written work

#### Learning Outcome:

• Students should be able to answer correctly.

**Instructions (5 minutes):** Explain the format of the worksheet to students. Address any queries.

#### WORKSHEET

Dat	e:	Name:
1.		e whether each of the following statements is True or False. Give the correct answer all false statements.
	a)	Population is spread unevenly across the world.
	Ь)	Antarctica has the largest population in the world.
	c)	A densely populated area is less likely to experience shortages of resources.
	d)	Negative rate of population is the speed at which the number of people increases during a given time.
2.	Exp	ain the following terms:
	a)	Demography
	b)	Population ethnicity

:)	Population density
)	Population explosion
e)	Depopulation
)	Overpopulation

## GEOGRAPHY Some Major Urban Centres of the World

#### **Discussion points**

Tokyo, Sau Paulo, New Delhi, New York, London, and Sydney are some of the major urban centres of the world, different in some ways, comparable in some. Geographical location, society, culture, traditions, development, financial progress, etc. are to be compared.

#### **ANSWER KEY**

**Content review** 

- A 1. Respect for older people and obedience to them
- A 2. Similarities: Freedom to follow any religion, celebration of all kinds of religious festivals, busy cities, important trading and business centres. Differences: New Delhi—people believe in a strong family system, population mainly natives, New York—people are free to choose and do as they please, cosmopolitan city, people from all over the world live here.
- A 3. Dense population, economic and commercial activity, developed and busy cities, historical and cultural monuments.
- A 4. Zero longitude passes through Greenwich, a part of London. Longitudes and time zones of the world are calculated from this point.
- A 5. When it is summer in the northern hemisphere, the southern hemisphere experiences winter, and vice versa. This is because of the Earth's tilt and position during its revolution around the Sun.

**Going further** 

- a. Open-ended question. Discuss problems of your city and brainstorm for ideas in class. Check for correctness and sensibility of ideas.
- b. Open-ended question. It would be interesting to see what comparisons they come up with.

#### **Lesson Plans**

Number of lessons: 2

Duration: 40 minutes

**Resources:** textbook and atlas

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#### Lessons 1 and 2—Six urban centres of the world

#### **Teaching Objective:**

• To familiarize students with some of the major cities of the world

#### Learning Outcomes:

Students should be able to:

- locate the major cities of the world on a map
- explain each city's importance in the modern world
- compare it with a major urban centre in their own country

#### Introduction (10 minutes):

Remind students about the urban centres of Pakistan and Asia that they studied about in Class VI and VII respectively. Tell them they will now be studying urban centres on different continents. Build up enthusiasm.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Discuss each urban centre with reference to its uniqueness and similarities. Take up Karachi as Pakistan's most important urban centre and compare.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Content review questions 1-5

#### **Project/Activity**

Research

- a) Going further
- b) Make a poster about Karachi, Pakistan's largest urban center. Content should include map coordinates, climatic zone, population, culture, monuments and buildings, historical perspective, geographical features, and any other interesting information.

**CHAPTER 13** 

## **GEOGRAPHY** Transport and Communication

#### **Discussion points**

Transport and communication play an important role in the development and progress of countries. They are essential in the transfer of goods and exchange of ideas.

#### **ANSWER KEY**

**Content review** 

- A 1. Facilitates trade, utilizes idle resources, saves time, provides employment, helps in rescue operations
- A 2. Transport refers to the physical movement of people or things from one place to another via some means, e.g. cars, buses, trains, ships, etc. Communication refers to the process of exchange of ideas, news, and information so that people are informed and connected.
- A 3. Open question—judge students on how they justify their opinion
- A 4. Open question—hints: meeting people vs social networking, making phone calls vs text messaging, writing letters vs emails.
- A 5. Brainwashing of individuals and communities, exposure to negative qualities, creating hopelessness and despair among people.

#### **Going further**

Research: open-ended question. Ask students to read out the interviews and discuss in class. Contents of interview must include dates, means of communication, the changes that have taken place, personal experiences, and opinions.

Challenge

Option 1

#### **Lesson Plans**

Number of lessons: 5

Duration: 40 minutes

**Resources:** textbook and atlas

#### Lessons 1 and 2—Transport

#### **Teaching Objective:**

• To describe a transport system and its uses

#### Learning Outcomes:

Students should be able to:

- name the components of a transport system
- explain the advantages of an efficient transport system

#### Introduction (10 minutes):

Ask students how they come to school and/or travel to near and far places. What happens when there is rain or traffic jams or other problems that cause delays? Bring in the importance of transport and roads.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Discuss the importance of roads and highways and effective means of transportation. Explain the concept of wet and dry ports. Describe how they aid both foreign and local trade.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Content review questions 1–2, Going further

#### Lessons 3 and 4—Communication

#### **Teaching Objective:**

• To explain the importance of telecommunications

#### Learning Outcomes:

Students should be able to:

- explain the advantages of telecommunications
- visualize the evolution of various means of communication and their advantages and disadvantages

#### Introduction (10 minutes):

Differentiate between transport and communication. Ask students to read out interviews from the *Going further* exercise. Write down key ideas from those interviews on the board.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Continue reading interviews and talk about contemporary means of communication and how they are different from earlier times. Discuss merits and demerits.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any. Play a game of Chinese Whispers.

Homework: Content review questions 3–5



#### **Project/Activity**:

Make a timeline for the evolution of communication from the earliest known forms to the present. Write an advantage and disadvantage for each form as well.

#### Lesson 5—Worksheet/Assessment sheet

#### **Teaching Objective:**

• To reinforce key concepts about transport and communication through written work

#### Learning Outcome:

• Students should be able to answer correctly.

**Instructions (5 minutes):** Explain the format of the worksheet to students. Address any queries.

#### WORKSHEET

Name:			
wer the following questions.			
What are the key elements of an effective transport system?			
Explain how each of them contributes to the utility and efficiency of the system.			
ify the following statements with reasons and explanations.			
A good transport system:			
helps in the development of markets			
creates a feeling of closeness and community			
makes rescue and relief operations easier			
at are some advantages of communication?			

GEOGRAPHY

4. Look at the challenge box in the text and define a wet port in your own words.

## CHAPTER 14 The Value of Knowledge and Teachers

CIVICS

#### **Discussion points**

Students must know the difference between literacy, learning, education, upbringing, training, and knowledge, and how they are linked. Literacy is simply the ability to read and write. Education is a formal, structured approach to learning. Learning is the act of acquiring knowledge. Training is education or knowledge acquired by practice and discipline in order to perfect it. Upbringing is the value system with which an individual is brought up. Knowledge is the sum total of what is acquired through literacy, learning, education, training and upbringing in order to make a difference to oneself and the world around.

The value and contribution of teachers to societies and communities, as imparters of knowledge, cannot be undermined. Their respect and dignity must be maintained at all times.

### **ANSWER KEY**

**Content review** 

- A 1. Imparting knowledge and teaching correct values.
- A 2. Respecting teachers in their absence and presence, make their best effort to gain knowledge.

**Going further** 

- a. Open-ended question. Ask students to read out their stories and discuss them in class.
- b. Open-ended question. Ask students to read out the ways in which they would tackle the situation.
- c. Open-ended question. Ask students to read out their suggestions and discuss them.

Challenge

Open-ended question

**Lesson Plans** 

Number of lessons: 3

Duration: 40 minutes

Resources: textbook and atlas

#### Lesson 1—The value of knowledge

#### **Teaching Objective:**

• To explain the concept of knowledge

#### Learning Outcome:

• Students should be able to explain knowledge in their own words

#### Introduction (10 minutes):

Discuss the words given in discussion points. Draw a triangle on the board and ask students to place them from bottom to top in the order of their importance. At each step, discuss why they would want to place it at the particular slot. Knowledge should be right on top to indicate its lofty status. Read and discuss the quotes.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Knowledge does not only mean knowing something. It embodies all learning experiences, formal and informal, and its real merit (intrinsic value) lies in its application for betterment of individuals and communities. Discuss the effects of knowledge without correct action, or learning without practice. True knowledge can help us distinguish between right and wrong and take the right step. Also talk about the humility that accompanies knowledge and how arrogance coupled with knowledge tends to devalue it.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Ask students to complete the challenge box given in the text and have them read out their answers. Put up the best ones on the class board. Answer student queries, if any.

**Homework:** Ask student to bring in their favourite quotation about knowledge. Ask them to explain its meaning and their reasons for liking it.

#### Lesson 2—The value of teachers

#### **Teaching Objective:**

• To reinforce the idea of respect for teachers

#### Learning Outcome:

Students should be able to describe the importance of teachers.

#### Introduction (25 minutes):

Begin with a small activity. Ask students to come up to the front of the class in turns and read out their assigned homework. Wind up in about 25 minutes. Watch students' reactions as they deliver. Pretend that you are a student—ask questions, be distracted, fidget occasionally.

#### Explanation (10 minutes):

Take students' feedback on how and what they felt and observed while 'teaching.' Did it feel good to impart knowledge? Did they get disturbed by distractions? Were they nervous? Read from the text and talk about how teachers must be respected.

**Conclusion (5 minutes):** Recap and review the lesson highlighting the main ideas. Answer student queries, if any.

#### **Homework:** *Content review* questions 1 and 2

#### **Project/Activity**:

Divide students into groups or pairs to make honour cards with a two-line tribute to all teachers around them. Have a read out session. Make sure there is a card for all teachers.

#### Lesson 3—Written work/Assessment

#### Teaching Objective:

• To reinforce key concepts about the value of knowledge and teachers through written work

#### Learning Outcome:

• Students should be able to answer correctly.

**Instructions (5 minutes):** Explain the format of the worksheet to students. Address any queries.

Class work (35 minutes): Any exercise from Going further

**CHAPTER 15** 

# **Dealing with Negative Feelings**

CIVICS

#### **Discussion points**

Negative feelings are natural. We cannot stop people from having negative thoughts. However, we can prevent negative feelings from taking control of our minds and hearts through awareness and self-discipline. This is an achievable target.

#### **ANSWER KEY**

**Content review** 

- A 1. Feelings that make you think badly of yourself or others usually without any assigned reason are called negative feelings. They do not let you see the good around you and make you focus on negative aspects only.
- A 2. Jealousy, envy, self-pity, anger, vengeance, brooding over the past, etc.

#### **Going further**

- a. I thought they were talking about me. I felt angry. I felt jealous. I was so angry.
- b. Open-ended question. Discuss story with students. Share feedback.
- c. Open-ended question. Talk about exercising caution before jumping to advise people about negative thinking, diplomacy, awareness of what happened, gaining trust, and not betraying it later if a secret is shared. Then work on strategies to help that person. Discuss what those strategies could be.

#### **Lesson Plans**

#### Number of lessons: 4

Duration: 40 minutes

**Resources:** textbook and atlas

# Lesson 1—Identifying negative feelings and examples of situations in which they can arise

#### **Teaching Objective:**

• To introduce the idea of negative feelings

#### Learning Outcome:

Students should be able to:

- identify negative feelings in given situations
- propose solutions and alternate points of view for given situations

#### Introduction (10 minutes):

Read aloud the situations given in the text. Ask students if they have gone through such situations before. How did they feel? What were the effects/results/learning? Did they feel happy?

#### Explanation (25 minutes):

Reading and parallel explanation from text. Discuss how natural it is to have negative thoughts. Tell them to treat such thoughts as temporary instead of harbouring them in their hearts and minds. Stress on the negative outcomes of negative thinking.

#### Conclusion (5 minutes):

Recap and review the lesson highlighting the main ideas. Answer student queries, if any. Give small pieces of paper to each student and ask him/her to (a) make a list of all negative thoughts that come to them, (b) whether they let them 'stay around' or ignore/shun them (c) how does it affect them and people around them, (d) how do they plan to cope with such thoughts in future. These sheets of paper should not have their names but some kind of mark so that they can identify it as theirs.

Homework: Content review questions 1 and 2

#### Lesson 2—Problems created by negative feelings

#### **Teaching Objectives:**

- To identify some issues created by negative feelings
- To discuss ways of dealing with negative feelings

#### **Learning Outcomes:**

Students should be able to:

- identify negative feelings in given situations
- describe the problems created by negative feelings

#### Introduction (10 minutes):

Discuss the concluding activity of the previous lesson. Collect the 'negative thinking' papers, shuffle them and pass them around randomly. Ask students to read out what they get. Discuss and comment.

#### Explanation (25 minutes):

Reading and parallel explanation from text. Explain how negativity bogs people down and prevents them from taking right decisions.

#### Conclusion (5 minutes):

Recap and review the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Going further exercises (a) and (b)

#### Lesson 3—Overcoming negative feelings

#### **Teaching Objective:**

• To discuss ways of dealing with negative feelings

#### Learning Outcome:

• Students should be able to propose solutions and suggest alternate points of view for given situations.

#### Introduction and explanation (10 minutes):

Use Going further exercise (c) as the opening question. Ask students to imagine themselves as someone affected by negativity as well as a counselor/advisor/friend who would like to help someone come out of it. Generate discussion about how to help and how to react to help.

#### Conclusion (5 minutes):

Preparatory talk for the next lesson. End on this question: Are people born negative thinkers and thus they cannot be helped?

#### Class work: Written work

Instructions: (5 minutes): Explain the format to the students. Answer any queries.

Task: (20 minutes): Going further exercise (c)

Resource: textbook

#### **Project/Activity**:

Enactment of negative thinking situations given in the textbook.

### CHAPTER 16 Positive Thinking and Values

### CIVICS

#### **Discussion points**

Positive thinking has an energy that chases negative thoughts away. It has to be cultivated through awareness and self-discipline, and has many benefits. It does not come easily to many people but it can be developed. It depends on the readiness of a person to change for the better. Positive thinking cannot change things around, but it does make one look at options to avoid or deal with situations in a better manner.

#### **ANSWER KEY**

**Content review** 

- A 1. Activity-based question. Use a dictionary to look up the meanings of the nine positive traits.
- A 2. Open-ended question

**Going further** 

Open-ended question. Give students the option of narrating an incident which illustrates the power of positive thinking. Alternately ask them to write a small inspirational speech or a dialogue.

#### **Lesson Plans**

#### Number of lessons: 2

**Duration:** 40 minutes

Resources: textbook and atlas

#### Lessons 1 and 2—Positive thinking

#### **Teaching Objective:**

• To encourage positive thinking

#### Learning Outcomes:

Students should be able to:

- identify and list positive ideas
- provide alternate ways of thinking about a given situation

#### Introduction (10 minutes):

Bring in the concluding question from the previous lesson. Write down A for 'Agree' and D for 'Disagree' (if any) on the board. See how many As and Ds there are. Write down the statement: positive thinking rules!

#### Explanation (25 minutes):

Reading and parallel explanation from text. Talk about developing a positive attitude and making it a part of one's nature. Take up each point on page 112 of the textbook and discuss how it can help.

#### Conclusion (5 minutes):

Recap and review the lesson highlighting the main ideas. Answer student queries, if any. End with the story below.

#### The story of the two wolves

One evening an old Cherokee told his grandson about a battle that goes on inside people. He said, 'My son, the battle is between two wolves inside us all. It is a terrible fight and it is between two wolves. One is evil—he is anger, envy, sorrow, regret, greed, arrogance, self-pity, guilt, resentment, inferiority, lies, false pride, superiority, and ego.' He continued, 'The other is good—he is joy, peace, love, hope, serenity, humility, kindness, benevolence, empathy, generosity, truth, compassion, and faith. The same fight is going on inside you-and inside every other person, too.'

The grandson thought about it for a minute and then asked his grandfather, 'Which wolf will win?'

The old Cherokee simply replied, 'The one you feed.'-(Native American fable)

#### Lesson 3—Written work

#### **Teaching Objective:**

• To reinforce key concepts about positive thinking through written work

#### Learning Outcome:

• Students should be able to answer correctly.

**Instructions (5 minutes):** Explain the format of the classwork to students. Address any queries.

**Class work (**35 minutes): Write an answer to the *Going further* exercise.

# CHAPTER 17 Human Rights

### CIVICS

#### **Discussion points**

Every person is born with some rights and duties. If each person fulfils his or her duty towards others, there would be fairness in the world. Even prisoners and criminals have rights. The right of a patient is to receive correct treatment and kindness from the doctor, the doctor has the right to receive payment, understanding, and respect from his patients. Such rights are called reciprocal rights. All cultures, religions, and countries of the world have some charter of rights to ensure that every individual gets his or her rights. Human rights is an umbrella term that covers all such rights. The people of a state or country have the right to freedom, security, well-being, etc. However the state or country too has the right to be respected, its property looked after and safety from damaging activities.

#### **ANSWER KEY**

**Content review** 

- A 1. Answers on page 116 in the textbook.
- A 2. Favouritism, nepotism, discrimination
- A 3. To make sure that atrocities like the ones in the World Wars were not repeated
- A 4. 1948
- A 5. It sets the basic standards that every human being around the world deserves.
- A 6. Open-ended question. Child rights are listed in the chapter.

#### **Going further**

- a. All human beings are born free and equal; right to life, liberty, and security; prohibition of slavery; justice; freedom from attacks on honour and reputation; freedom of religion
- b. equality, equality, respect, justice, justice, tolerance, justice, equality, justice, equality

#### **Lesson Plans**

#### Number of lessons: 3

Duration: 40 minutes

Resources: textbook and atlas

#### Lessons 1 and 2—All about human rights

#### **Teaching Objectives:**

- To introduce the concept of human rights
- To name and discuss some basic human rights

#### Learning Outcomes:

Students should be able to:

- explain the importance of human rights
- describe how the Universal Declaration of Human Rights was developed
- identify some basic human rights

#### Introduction (10 minutes):

Remind students about the devastating effects of the World Wars that they studied briefly in the History section. How did the soldiers feel about being forced to fight? What happened to their lives, families, and property? What about losses of civilians' lives and property? Did the world powers and their allies regret what they did to people?

#### Explanation (25 minutes):

Reading and parallel explanation from text. Discuss what the term 'human rights' means, when and why the UNDHR was formulated and what it entails. Discuss some basic human rights. Stress on how rights and duties go hand in hand. Explain the details of articles 2, 7, 23, 27, and 28.

#### Conclusion (5 minutes):

Recap and review the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Content review questions 1 and 2

#### Lesson 3—Written work/Worksheet

#### **Teaching Objective:**

• To reinforce key concepts about human rights through written work

#### Learning Outcome:

• Students should be able to answer correctly.

**Instructions (5 minutes):** Explain the format of the worksheet to students. Address any queries.

Class work (35 minutes): Content review and Going further

**Resources:** textbook

#### **Project/Activity:**

1. Watch your local news. You will often see people protesting by setting fire to buildings and vehicles, vandalising public property, looting, and injuring people.

Are they justified? If they are being given the right to protest against unfairness, does that give them the freedom to do whatever they want?

2. You have seen beggar children—older, younger, or around the same age as you. Often motorists and pedestrians shout at them, abuse, and mistreat them. What rights do you think these children have and what are their duties? Do you think they have the right to be respected and be given suitable homes and lives? Who should give these rights to them? What is the obstruction in providing them with these rights? How can it be made possible? Make a poster with a strong, justified statement about their rights and encourage people to find a solution.



### **Answer Key**

#### Chapter 1

- Q 1. a) Jahangir
  - b) peaceful
  - c) generals, Mughal
  - d) instigator
- Q 2. Virtual kingmakers
- Q 3. Art, poetry, and literature
- Q 4. He could not or did not take active part in matters of the empire, and turned towards Sufism and poetry.
- Q 5. a) Banda Bahadur: a Sikh leader who unified and strengthened the Sikhs, and plundered and looted Delhi. Major trouble maker for the later Mughals
  - b) Ahmad Shah Abdali: Nadir Shah's governor, became the ruler of Afghanistan after Nadir Shah's death. Ahmad Shah (Mughal) surrendered Multan to him. Abdali quashed the Marathas at the Battle of Panipat.
  - c) Mohammad Shah: Managed to get rid of the Sayyid brothers, but fell into pleasure seeking and neglected empire. Nadir Shah took advantage of his weakness, invaded the empire and defeated the Mughals.

#### Chapter 2

- Q 1. a) Shahjahan
  - b) Shahji
    - c) Panipat, Ahmad Shah Abdali
    - d) 1800
    - e) Amritsar
    - f) Khusro Mirza
    - g) Guru Gobind
- Q 2. a) Religious leader of the Sikhs
  - b) Power, control, or rule over a colony or acquired territory by a stronger foreign power
  - c) A movement or series of actions which are aimed at taking revenge from someone
  - d) Plundered, looted, and massacred without reason

- Q 3. a) cruel, barbaric, hostile, interested in plunder and warfare, not interested in administrative, social, and economic reforms
  - b) 'Though he was...damage to the Mughals.' Page 7 of the textbook.
  - c) war with Ahmad Shah Abdali, internal conflicts
  - d) Because of their plundering ways and senseless killing
  - e) Belief in one God and seeking His favours through meditation, justice, equality, and learning
  - f) Jahangir did not show favour and tolerance towards the Sikhs and killed Guru Arjun Singh because he was Khusro's ally.
  - g) A Sikh emperor or maharaja who created an independent Sikh empire in the Punjab in the early 19th century

#### Chapter 3

- Q 1. a) middle
  - b) explorers
  - c) trade
  - d) Goa
  - e) Indonesia
- Q 2. a) Via the northern route, goods from eastern Asia reached Europe through the River Amu and the Caspian Sea, ending at the Black Sea. The middle route passed through Syria and adjoining areas to reach the Mediterranean Sea. The southern trade route was by sea. Ships sailed through the Arabian Sea into the Persian Gulf, then the merchandise was moved overland through Iraq to reach Cairo in Egypt, which also lies on the Mediterranean Sea. Many ships travelled through the Red Sea to reach Egypt directly.
  - b) 623 years
  - c) To avoid being questioned
  - A Roman navigator who discovered the monsoons as an aid to navigation through the Indian Ocean

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e) As the Islamic empires grew stronger through trade, the Christians felt threatened and wanted to explore alternate routes in order to become strong again.

#### Chapter 4

- Q 1. a) Queen Elizabeth I
  - b) Indonesia
  - c) Plassey
  - d) French
  - e) 1749
  - f) French, Madras
  - g) Bengal
  - h) British
  - i) Buxar
- Q 2. a) i. He knew the British would want to do things their way and bring in their ways. He did not trust the British.
  - ii. He was right because the British flouted their agreement and deceived the Indians.
  - b) i. formed a small yet powerful army, made a strategic move towards Arcot because he knew it would be unguarded and make an easy entry, bribed Mir Jaffer into treachery
    - ii. astute, clever, capable, would go to any lengths to achieve targets
- Q 3. It was the richest and the most lucrative of all states.
- Q 4. a) tribute to King William of England
  - b) flouting agreements over trade privileges and building fortifications

#### Chapter 5

- Q 1. a) Mysore
  - Ь) 20
  - c) 1799
  - d) 1858, East India Company
  - e) 1858

- Q 2. a) The authority, rule, and orders by a monarch, in this case the Queen of England
  - b) The British East India Company
  - c) The British could not defeat or deter him easily.
  - d) The British did not care about the feelings and sentiments of the locals and imposed their rules and way of life. They demeaned the Indians and considered themselves superior.
  - e) They wanted to spread their ideas and culture, and quickly transform the Indian way of life—thoughts, culture, and tradition.
- Q 3. a) Because of their corruption, arrogance, insensitivity, deceit, and highhandedness with the locals
  - b) Limited their activities to trade only, appointed a board of control in London to oversee all political and military appointments and decisions
  - c) Appointed British governors and rulers
  - d) In the absence of a natural heir, the East India Company will take over the state.
  - e) Lord Dalhousie, the Governor-General of the East India Company
  - f) The British did not recognize the Rani's adopted son as a true heir and attempted to take over the state.
  - g) Because the British tried to take over the state of Jhansi by implementing the Doctrine of Lapse.
  - h) it happened suddenly, the locals were not prepared, there was no capable leader to guide them, not enough soldiers, many Indian soldiers were British loyalists too

#### Chapter 6

- Q 1. a) False—they had always coexisted peacefully.
  - b) True
  - c) True



- False—the British had pro-Hindu and d) anti-Muslim sentiments.
- False—it brought poverty, suffering, and e) losses
- f) True
- False g)
- 1914 Q 2. a)
  - b) Great Britain, France, Russia
  - German, Austro-Hungarian, Turkish, c) Bulgaria.
  - d) 1939, 1945
  - nationalism e)

#### Chapter 7

- Q.3 a) power tussles and policy issues between European countries
  - b) Because of the extent of damage to life and property, and the use of nuclear weapons
  - They had been let down too often. c)
  - To have an independent India but with d) the interests of Muslims and Hindus protected and separate.

- /	atmosphere temperatures	~	Troposphere, 8 ice	(	higher d holes	4)	carbon diox	ide	
Q.2 a)	mesosphere	Ь)	convection	c)	precipitation d	d)	humidity	e)	mesosphere

- O 3. a) Troposphere is the first layer of the atmosphere where most of the weather changes and cloud formations take place. The thermosphere is the last and the hottest of the layers and is 80 km above the Earth's surface.
  - Greenhouse effect is when greenhouse gases act as a roof and heat from the sunlight is b) trapped and sent back to the Earth instead of being allowed to escape. Global warming is the globally increasing temperatures because of the greenhouse effect.
  - Atmospheric temperature is the temperature or amounts of varying heat in the atmosphere; c) atmospheric pressure is the pressure exerted by the atmosphere.

Q 4.		Cause	Effect		
	The ozone layer is developing holes.	Chemical reactions between some gases and man-made compounds	dangerous for agriculture and marine life, causes health problems like skin cancer		
	Excessive amounts of carbon dioxide are being emitted into the atmosphere.	Burning of excessive amounts of fuel in vehicles and industry	prevents heat from going back into space; global warming		
-	The average temperature of the Earth is rising.	Global warming	melting of ice, ocean acidification, rise in ocean temperatures		
	More heat is being trapped on Earth instead of being released into space.	Greenhouse effect	Global warming		
	It becomes hot and stuffy before rainfall.	Saturated clouds prevent wind and breeze; there is humidity in the atmosphere	Rainfall		

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#### Chapter 8

- Q 1. a) directions
  - b) trade winds
  - c) day
  - d) night
  - e) 200
  - f) knots

#### Chapter 11

- Q 2. a) They become hot, heat up the air above causing it to rise and create gaps called low-pressure areas. Cooler, heavier air rushes in to fill these gaps.
  - b) They help sailors to travel in the same direction
  - c) Diagram
  - d) Small hollow cups are attached to a vertical rod. They move like a fan when the wind blows.
- Q 1. a) tropical b) flora succulents d) habitat c) deciduous h) e) forest f) tundra trench g) i) twilight bioluminescence k) wetlands j)

Q 2. Complete the table.

Biome	Description	Plant and vegetation	Animals
Rainforests	Forests which receive large amounts of rainfall	Variety of trees, shrubs, and bushes	snakes and other reptiles, gorillas, jaguars, amphibians, birds, insects, and bats
Deserts	Dry, arid regions	Cactus, other succulents, and palms	camels, snakes, turtles, predators like hawks and foxes, scorpions, lizards, insects, and rodents
Forests	Large numbers of trees clustered close together	Large numbers of trees, shrubs, bushes	all kinds of animals, birds like parrots, insects, mammals, monkeys, reptiles
Freshwater biomes	Found in rivers, streams, wetlands, ponds and lakes	plankton, floating plants	insects, shelled animals, amphibians, fish like salmon, catfish, and trout
Tundras	Treeless, cold land	mosses, lichens, shrubs, and some flowering plants	Arctic fox, owls, insects, lemmings
Grasslands and savannahs	Rolling plains with grasses, shrubs,+ and few trees	trees, shrubs, bushes and grasses	large and small predators and carnivores, elephants, giraffes, zebras, wild horses, deer, baboons

#### ANSWER KEY

#### Chapter 10

- Q 1. a) fuel
  - b) non-renewable
  - c) imbalance
  - d) conservationists
  - e) fresh
  - f) population
  - g) 1 billion
  - h) 380
- Q 2. a) Completely used up with nothing left
  - b) Affecting the working of the ecosystem by disturbing the working, connection, and dependence of its components by over-use
  - c) So people can be guided about the importance and methods of conservation, responsibility is shared, and resources can be saved
  - d) Amount of water removed from the system
  - e) Cracks in the dried up river bed that cause it to shrink
  - f) Misuse and unfair distribution of water
  - g) How to channelize, distribute and conserve water, prevent waste
- Q 3. a) Most of it is seawater; some fresh water is contaminated; inefficient water management
  - b) 417 million litres
  - c) Sustains all form of life

#### Chapter 11

- Q 1. a) True
  - b) False—totally uninhabited
  - c) False—more likely
  - d) False—number of people decreases
- Q 2. a) Study of population and its characteristics
  - b) Group of people sharing heritage or place of origin
  - c) Number of people in a given area
  - d) Sudden and rapid increase in population
  - e) Decrease in population
  - f) Too many people

#### Chapter 13

- Q 1. a) A developed road and highway system, means of transport, airports, and wet and dry ports
  - b) Roads and highway systems ensure efficient movement of people and goods, preventing jams and delays. Means of transport facilitate the movement of different kinds of goods and provide alternate means of transport for people travelling different distances. Ports (air, wet, and dry) facilitate trade and industry, helping the country's economy.
- Q 2. Open-ended question
- Q 3. People are informed and aware.
- Q 4. Open-ended question

